MUNICIPAL AND INDUSTRIAL
WATER SUPPLY AND USES
in the
UTAH LAKE BASIN

(Data Collected for Calendar Year 2003)

Prepared by

Utah Department of Natural Resources
Division of Water Resources

May 2004

ACKNOWLEDGMENTS

This study was conducted under the direction of Eric L. Millis, assistant director, and supervised by Eric K. Klotz, chief, Water Conservation, Education & Use Section, Utah State Division of Water Resources. Staff members participating in the preparation of this report and/or in the data collection and analysis were Gregory Williams, and Barbara Perry. Appreciation is expressed to the various water suppliers and the Division of Water Rights for supplying information for this report.

Dennis J. Strong, Director

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EXECUTIVE SUMMARY

This document describes the municipal and industrial (M&I) water supplies and uses for the Utah Lake Basin with data collected for the calendar year of 2003. All resultant information presented represents the water supply and demand conditions of the calendar year 2003 only and may not be representative of the conditions of a "normal" year. Total M&I water supplies and uses for the basin are computed by tabulating results of water use studies in the four counties in which the basin is contained. These counties are portions of Juab, Summit, and Wasatch, as well as all of Utah County. The county data was collected through meetings with and/or surveys of each public community and non-community water system.

The basin's maximum annual potable water supply under present conditions for Public Community Water Systems is 342,405 acre-feet. Springs account for 17 percent of this total, wells 47 percent, and surface sources 36 percent. **Table I** presents this data, broken down into further detail.

TABLE I
UTAH LAKE BASIN
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

County	Springs	Wells	Surface	Total
Juab	1,934	2,769	0	**4,703**
Summit	388	312	0	**700**
Utah	49,284	154,423	118,700	**322,407**
Wasatch	6,718	3,377	4,500	**14,595**
Basin Totals	**58,324**	**160,881**	**123,200**	**342,405**

Note: All values represent system source capacities limited by water rights, hydrologic constraints, and/or physical system constraints.

The basin's annual reliable potable water supply for the public community water systems in the basin is 166,243 acre-feet. The breakdown of this supply is presented in the following **Table II**.

TABLE II
UTAH LAKE BASIN
Reliable Potable Water Supplies for Public Community Systems
(Acre-feet/year)

County	Springs	Wells	Surface	Total
Juab	1,156	1,619	0	**2,775**
Summit	221	180	0	**401**
Utah	32,215	91,010	29,350	**152,575**
Wasatch	4,171	1,821	4,500	**10,492**
Basin Totals	**37,763**	**94,630**	**33,850**	**166,243**

Total M&I water use can be divided into two categories: potable (culinary) and non-potable (secondary). Potable water is delivered by public community, public non-community, self-supplied industrial, and private domestic water systems. Non-potable water uses include residential, commercial and institutional secondary water (usually delivered by separate irrigation companies), as well as secondary water used by self-supplied industries. **Table III**, on the following page, indicates the total potable and non-potable M&I water use for all systems in the Utah Lake Basin for the year 2003.

The table indicates that the total potable M&I water use in 2003 was 107,239 acre-feet. Total non-potable water use in the basin for 2003 was 38,349 acre-feet. Therefore, the total M&I water use for the Utah Lake Basin in 2003 was 145,588 acre-feet. **Table III** also indicates that the public community water systems delivered the

TABLE III
UTAH LAKE BASIN
Total M&I Water Use for all System Categories
(Acre-Feet/Year)

Source	Juab County	Summit County	Utah County	Wasatch County	Total
Potable Suppliers:					
Public Community Systems	1,693.4	246.0	95,267.5	3,238.7	**100,445.6**
Public Non-Community Systems	2.0	4.1	278.1	113.9	**398.1**
Self-Supplied Industries	10.0	0.0	675.0	0.0	**685.0**
Private Domestic	200.0	10.0	5,000.0	500.0	**5,710.0**
Total Potable	**1,905.4**	**260.1**	**101,220.6**	**3,852.6**	**107,238.7**
Non-Potable Suppliers:					
Secondary Irrigation Companies	470.0	65.0	25,429.0	1,502.1	**27,466.1**
Non-Community Systems	0.0	10.0	26.0	955.0	**991.0**
Self-Supplied Industries	190.0	0.0	9,702.0	0.0	**9,892.0**
Private Domestic	0.0	0.0	0.0	0.0	**0.0**
Total Non-Potable	**660.0**	**75.0**	**35,157.0**	**2,457.1**	**38,349.1**
TOTAL WATER USE	**2,565.4**	**335.1**	**136,377.6**	**6,309.7**	**145,587.8**

majority of the potable water in the basin. For this reason, as well as additional reference, the following **Table IV** shows a further breakdown of the water use data for potable and non-potable categories of water delivered by public community water systems within the basin. Of the total water use shown, 26% was residential indoor, 43% residential outdoor, 14% commercial, 13% institutional, and 4% light industrial.

TABLE IV
UTAH LAKE BASIN
Categorical Water Use for Public Community Systems
(Acre-Feet/Year)

Source	Juab County	Summit County	Utah County	Wasatch County	Total
Potable Uses					
Residential Indoor	502.6	69.3	31,557.1	1,299.0	**33,428.0**
Residential Outdoor	711.5	140.1	32,432.0	1,345.0	**34,628.6**
Commercial	10.6	6.6	14,350.9	344.8	**14,712.9**
Institutional	118.0	25.0	12,809.4	160.0	**13,112.4**
Industrial	350.7	5.0	4,118.1	89.9	**4,563.7**
Total Potable	**1,693.4**	**246.0**	**95,267.5**	**3,238.7**	**100,445.6**
Non-Potable Uses					
Residential	420.0	65.0	19,310.0	1,182.1	**20,977.1**
Commercial	0.0	0.0	2,782.0	250.0	**3,032.0**
Institutional	50.0	10.0	3,075.0	70.0	**3,205.0**
Industrial	0.0	0.0	262.0	0.0	**262.0**
Total Non-Potable	**470.0**	**75.0**	**25,429.0**	**1,502.1**	**27,476.1**
TOTAL WATER USE	**2,163.4**	**321.0**	**120,696.5**	**4,740.8**	**127,921.7**

Out of a total 2003 basin population of 449,558, the population served by public community water systems in the basin was approximately 441,380. For the public community systems only, the calculated residential potable per capita water use is 138 gallons per capita per day (gpcd). Residential non-potable water use is 42 gpcd, resulting in total residential water use of 180 gpcd. Adding commercial, institutional and industrial uses, the public community systems water use is then 203 gpcd for potable and 56 gpcd for non-potable uses, for a total of 259 gpcd. These values are shown in the following **Table V**. By comparison, the 2000 statewide average total per capita water use for public community water systems was 293 gpcd.

TABLE V
UTAH LAKE BASIN
Average Per Capita Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.154	138
Residential Potable Plus Secondary Use	0.202	180
Total Potable Use	0.228	203
Total Potable Plus Secondary Use	0.290	259

Note: Total Potable categories include residential, commercial, institiutional and industrial uses.

Table VI includes the M&I water budget for the basin. A water budget indicates the amount of water for use within the basin and the amount of water depleted from the basin due to use. **Appendix E** contains a table that indicates more specific details about the diversions and depletions from each individual community system within the basin.

TABLE VI
UTAH LAKE BASIN
M&I Water Budget
(Acre-Feet/Year)

COUNTY	Diversions			Depletions		
	Indoor Use	Outdoor Use	Total	Indoor Use	Outdoor Use	Total
Juab	962.8	1,602.6	**2,565.4**	393.3	1,131.7	**1,525.0**
Summit	89.1	246.0	**335.1**	8.4	164.0	**172.4**
Utah	52,268.2	84,109.4	**136,377.6**	4,589.2	59,021.3	**63,610.5**
Wasatch	1,894.9	4,414.8	**6,309.7**	329.0	2,943.2	**3,272.2**
Basin Totals	**55,215.0**	**90,372.8**	**145,587.8**	**5,319.9**	**63,260.2**	**68,580.1**

INTRODUCTION

Authority

The Utah Division of Water Resources (DWRe) has the overall responsibility for completing studies, investigations, and plans to assist the responsible development and utilization of the water resources of the state of Utah. The State Water Plan, prepared and distributed in early 1990, provided the foundation and overall direction to establish and implement the state policy framework of water management. As part of the state water planning process, detailed plans are prepared for the 11 hydrologic basins in the state. The Utah Lake Basin is one of these 11 basins. A location map of the Utah Lake Basin is shown on the following page in **Figure 1**.

Each basin water plan identifies potential conservation and development projects and describes alternatives to efficiently satisfy the water needs of that basin. As part of this effort, background data reports are completed for each river basin. These include a Water-Related Land Use Report and a Municipal & Industrial (M&I) Water Supply & Use Report.

Scope

As stated earlier, the subject of this report is a determination of the present M&I water supplies and uses within the Utah Lake Basin. The data presented in all the referenced reports may be used in the State Water Plan for the Utah Lake Basin, as well as other division reports and studies. Information considered for this report also includes related investigations recently completed by the DWRe and the Utah Division of Water Rights (DWRi).

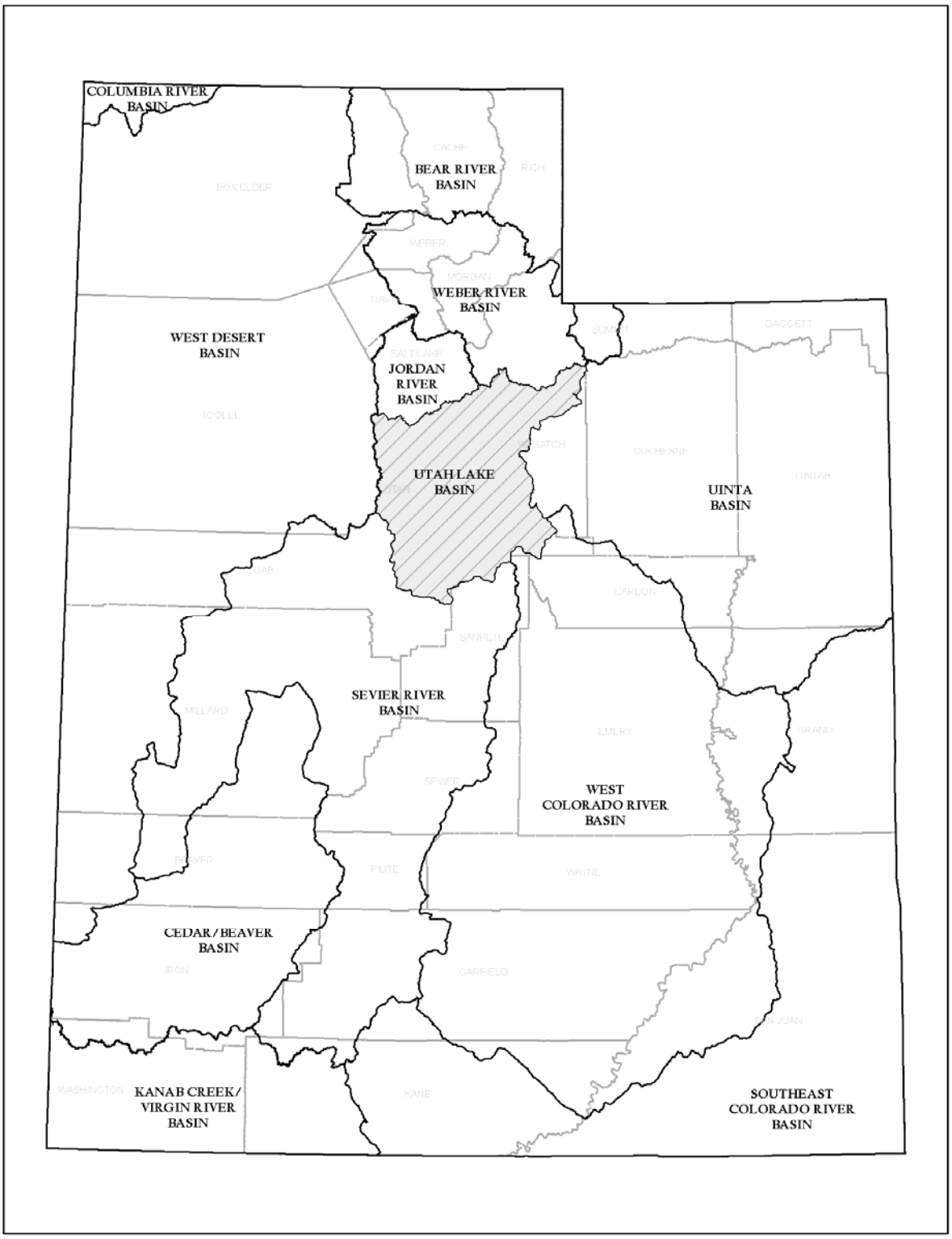


Figure 1. Location of the Utah Lake Basin

Data Collection

This study was begun in May 2004 by DWRe staff. The 2003 *Municipal and Industrial Water Use Forms,* as well as electronically submitted data, distributed by the DWRi in cooperation with the DWRe and the Utah Division of Drinking Water (DDW), were used as a basis for the study. In all counties, the data collection process is as described in the following section, *Water Supply and Use Methodology*. Water rights discussions and information presented herein were prepared based, in part, on information provided by John Mann, area engineer of the State Engineer's Office, who is responsible for the over sight of the water rights in the Utah Lake Basin.

General Description of the Basin

The Utah Lake Basin contains almost 3,850 square miles in north-central Utah bounded by the Traverse Mountains on the north, the Wasatch and Uintah Mountains on the east and south, and the East Tintic and Oquirrh mountains on the west. The basin encompasses most of Utah and Wasatch Counties, parts of Summit, Sanpete, and Juab Counties. The land within the basin rises from a low elevation of 4,475 feet above sea level at the Jordan Narrows to 11,928 feet at Mt. Nebo at the southern end of the basin.

The major waterways of the basin include the American Fork, Provo, Spanish Fork, and Jordan Rivers. With the exception of the Jordan River, Utah Lake is the main water body of the basin into which all the waterways within the basin drain. Being the only outlet of Utah Lake, the Jordan River drains north into the Great Salt Lake.

See **Figure 2** on page 5 for a detailed drainage map of the basin.

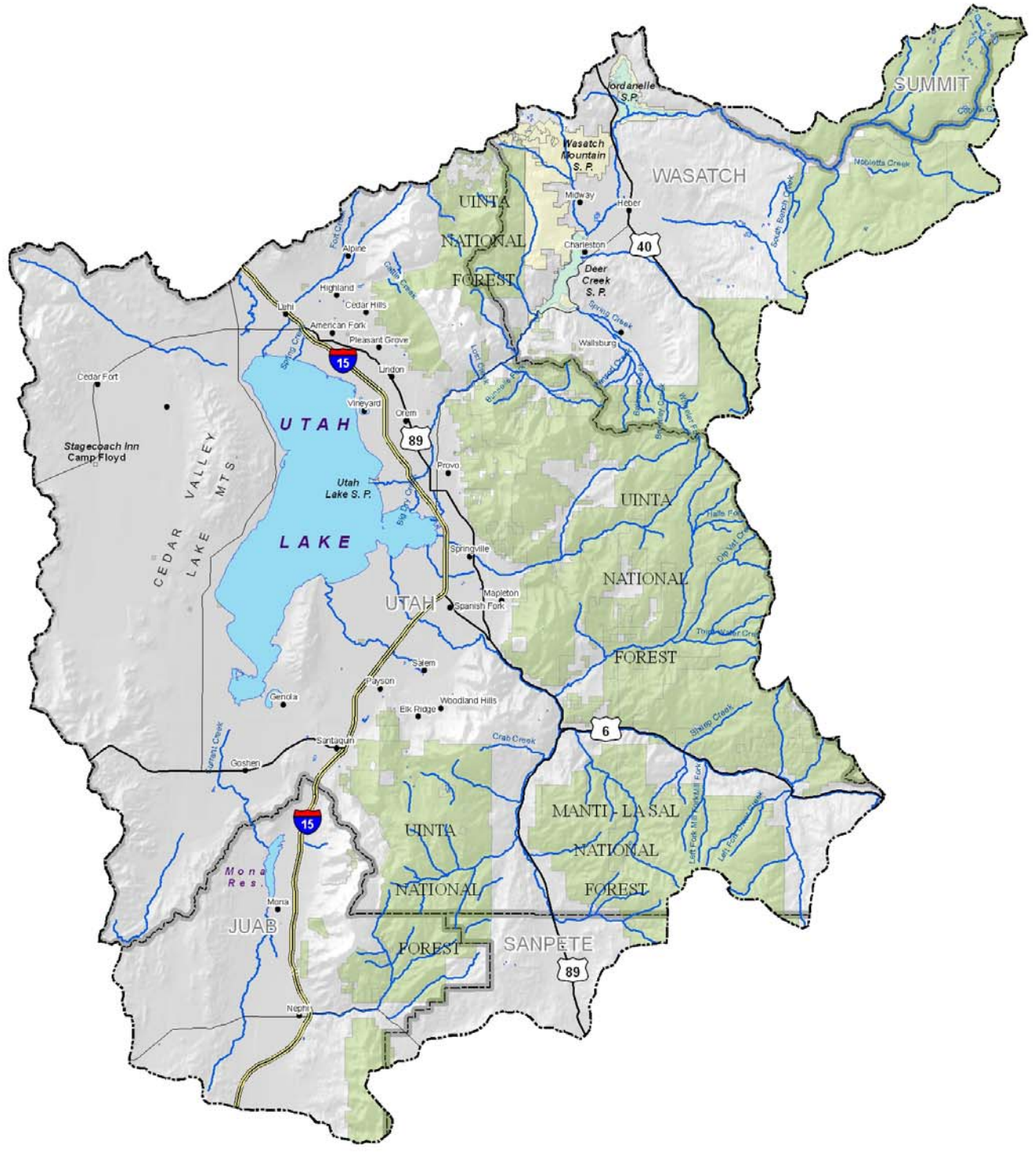


Figure 2. - Utah Lake Basin Drainage Map

0 3 6 12 18 24 Miles

Figure 2 – Utah Lake Basin Drainage Map

Within the Utah Lake Basin, there are fifty-five public community water systems serving a total population of approximately 441,380 people (most all of the 449,558 total basin population). The basin also has seventy-five public non-community water systems. These systems serve Federal Forest Service campgrounds, State Park facilities, isolated commercial and institutional establishments, summer home developments, roadside rest areas and parks. Among the larger non-community systems is the Deseret Feed Lot owned by the LDS church. See **Figure 3** on page 9 for the location of these systems. Within the basin there are also twelve self-supplied industries.

As with most areas of northern Utah, demographically, the basin's population is becoming increasingly more urbanized. Internal growth, migration of the Wasatch Front population, expanding employment and recreational opportunities are some of the major driving factors of population growth in the basin. The Governor's Office of Planning and Budget projects that the basin's population will more than double from the current population to over 1,000,000 people by the year 2050.

PUBLIC COMMUNITY SYSTEMS

Juab County

1 Mona
2 Nephi
3 Rocky Ridge Town

Summit County

4 Francis Town Water System
5 Woodland Mutual Water Co.

Utah County

6 Alpine
7 Alpine Cove Water SSD
8 American Fork City
9 Bradford Acres Water Assoc.
10 Cedar Fort
11 Cedar Hills
12 Covered Bridge Canyon
13 Eagle Mountain Town
14 Elberta
15 Elk Ridge
16 Fairfield Irrigation Company
17 Genola
18 Goosenest Water Co.
19 Goshen
20 Hidden Creek Water Company
21 Highland Water Co.
22 Lehi
23 Lindon
24 Manila Culinary Water Co.
25 Mapleton
26 North Fork SSD
27 Orem City
28 Payson
29 Pleasant Grove City
30 Provo City
31 Salem
32 Santaquin City
33 Saratoga Springs Municipal
34 Spanish Fork
35 Spring Lake
36 Springdell Plat A & B
37 Springville City
38 Utah State Hospital
39 White Hills Subdivision
40 Woodland Hills

Wasatch County

41 Canyon Meadows
42 Center Creek Water System
43 Charleston WCD
44 Country Estates Mobile Homes
45 Daniel Domestic Water Company
46 Heber City Water System
47 Interlaken Mutual Water Company
48 Jordanelle Special Service District
49 Midway City Water System
50 Storm Haven
51 Swiss Alpine Water Co.
52 Timber Lakes Water SSD
53 Twin Creeks SSD
54 Wallsburg Town Water System
55 Woodland South Hills Irrigation

PUBLIC NON-COMMUNITY SYSTEMS

Juab County

A Bear Canyon Campground
B Ponderosa Campground

Summit County

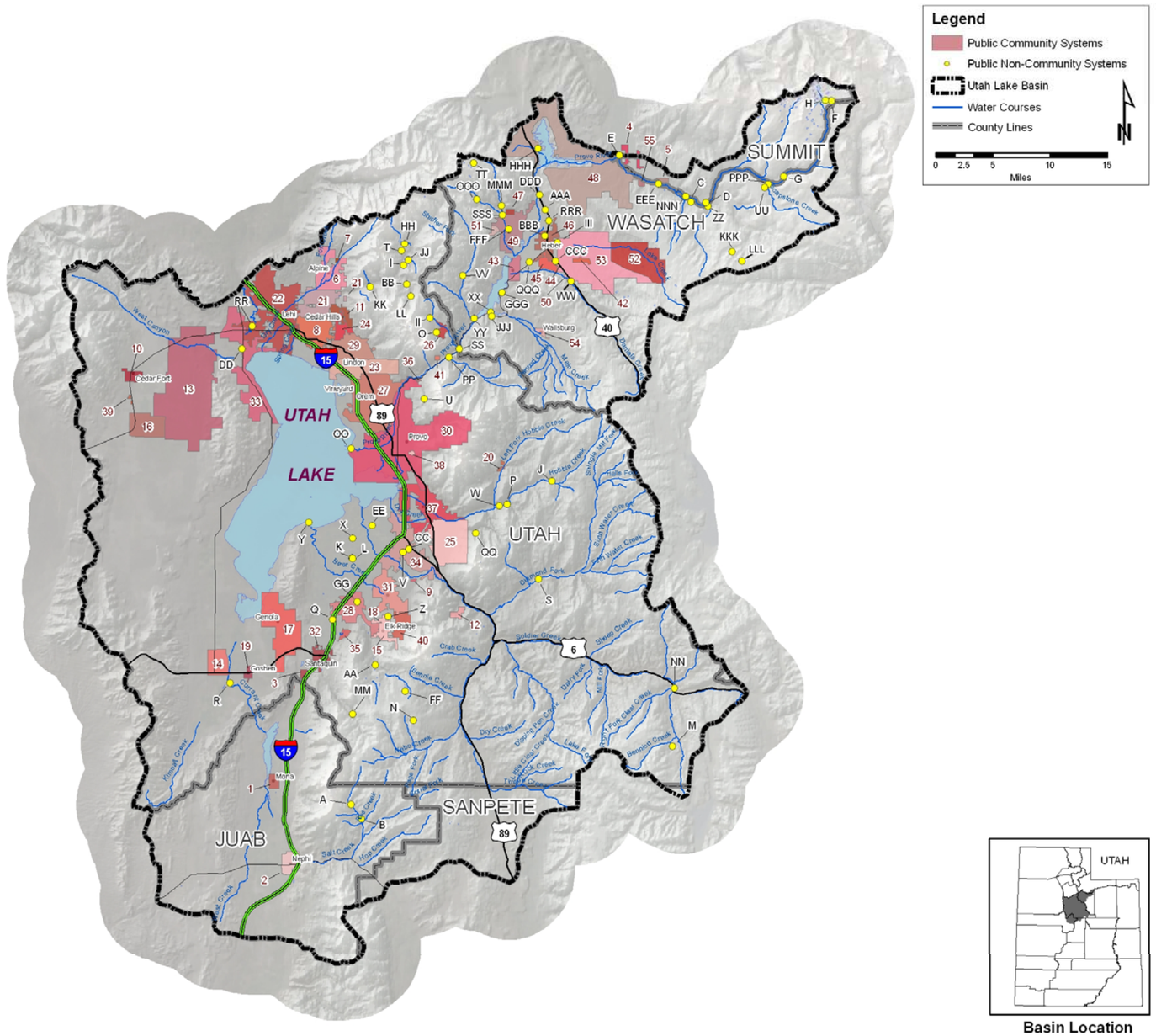
C Camperworld Knotty Pine
D Diamond Bar X
E Lemon Grove
F Lost Creek-Lily Lake CG
G Shady Dell/Soapstone CG
H Trial Lake CG

Utah County

I American Fork Recreation Site
J Balsam Campground
K Benjamin LDS Ward
L Benjamin Park
M Bennion Creek Campground
N Blackhawk Campground
O Brickerhaven
P Cherry Picnic Site
Q Christian Assembly
R Desert Feed Lot
S Diamond Fork Creek - CG
T Granite Flat Campground
U Hope Campground
V Jehovah's Witness Church
W Jolley Park
X Lake Shore Ward
Y Lincoln Beach
Z Loafer Water Users Assoc.
AA Maple Bench Campground
BB Mutual Dell
CC New Haven
DD New Haven Saratoga
EE Palmyra LDS Ward
FF Payson Lakes Campground
GG Payson W Stake 12/13 Wards
HH Silver Lake Summer Homes
II Theater in the Pines & Mt. Timp.
JJ Tibble Fork Summer Homes
KK Timpanogos Visitor Center
LL Timpooneke Campgrounds/GS
MM Tinney Flat Campground
NN Tucker Rest Area
OO Utah Lake State Park
PP Vivian Park Homeowners
QQ Whiting Campground
RR Willow Park
SS Wildwood Subdivision

Wasatch County

TT Camp Cloud Rim (Utah Girl Scouts)
UU Camp Roger YMCA
VV Cascade Springs
WW Daniel Summit Estates
XX Deer Creek Park
YY Deer Creek State Park
ZZ Diamond Hills Association
AAA Heber City Kingdom Hall
BBB Heber East Stake Center
CCC Heber Ranger Station
DDD Heber Valley RV Park
EEE Holladay-Mt. Olympus Camp
FFF Homestead Resort - Golf Course
GGG Island Beach
HHH Jordanelle State Park
III Lake Creek Rec. Properties
JJJ Little Deer Creek Camp
KKK Mill Hollow Campground
LLL Mill Hollow Education Center
MMM Oak Haven
NNN Oakcrest LDS Girls Camp
OOO Snake Creek Mutual Water
PPP Soapstone Summer Homes
QQQ Solid Waste Transfer Station
RRR The Other End
SSS Wasatch Mountain State Park



Basin Location

Figure 3. Location of Public Water Systems

WATER SUPPLY AND USE METHODOLOGY

Background

Over the past 45 years the Utah Division of Water Resources (DWRe) has employed various procedures to obtain municipal and industrial (M&I) water use data. In recent years, these procedures have become increasingly more comprehensive. When the division began water planning in the 1960's, available data consisted mainly of supplies and uses for the entire state. At that time, agriculture uses far exceeded M&I uses in Utah. M&I water use was generally calculated by using available or estimated per capita rates and multiplied by the census population data.

By the early 1980's, M&I diversions made up a larger percentage of all statewide water uses and the entire water community began to increase their focus on M&I water supplies and uses. The Utah Division of Water Rights (DWRi) launched a program to collect yearly, statewide M&I data from each public community water system. The procedure involved mailing a survey designed to query each of the major public water suppliers about their sources of water supply. Additionally, the United States Geological Survey (USGS) began M&I water use studies. The division relied on both data sources in its planning efforts by the late 1980's.

With the preparation of the State Water Plan Basin reports, and the increasing focus on water conservation, the DWRe saw the need to verify and improve the quality and quantity of the available data. The first method used included assisting the DWRi in the improvement of their M&I data collection program. Secondly, the DWRe began verifying the accuracy of the data through yearly field surveys described in the following four sections.

Present Methodology for Community Water Systems

Each year, the DWRe targets several hydrologic basins for M&I water supply and use analysis. The most recent water use information supplied by the DWRi is the basis used to begin the study. Prior to 2003, each water supplier, using a standard form, submitted this information. An example of the water use data form for Orem City is found in **Appendix E**. Since 2003, the program has been updated, allowing for the water suppliers to electronically submit their data.

The DWRe staff contact the manager or operator of each community water system, as defined by the Utah Division of Drinking Water (DDW) to schedule a data collection and analysis meeting. These meetings are necessary because data often is not reported (either on the water use forms or electronically) in the detail required for a complete M&I water use study. During these meetings, staff clarifies and collects additional data as needed. Total water supply and usage of the water systems are calculated based on information gathered during these meetings. When data is not available, it is necessary to estimate a part or all of the system use.

A secondary objective of these meetings is to instruct the operator or manager on how to most accurately and effectively complete the water use data form and/or submit their information electronically. This methodology has been used since 1992.

Water Supply

Two factors define the potable water supply: maximum water supply available under present conditions and reliable water supply. The maximum water supply available under present conditions is defined as the water resource that is presently developed. It is limited by a mechanical constraint (such as pump capacity or pipe size), a hydrologic constraint (such as reliable stream flow or groundwater safe yield) or a legal constraint (such as a water right or contract). The lesser amount of water supply, due to these three constraints, is considered to be the maximum water supply available under present conditions used in this analysis. The determination of well

pump capacities, average annual spring flow estimates, treatment plant capacities, and water right information aid in the calculation of this value. It should be noted that, due to the complexity of water rights, contracts, exchanges, etc., a detailed search of water right limitations associated with each entity is not within the scope of this study.

The reliable potable water supply is defined as the capacity to meet peak day demands, expressed as an annual volume. It is valuable in determining future water supply capacities of the particular community water system sources (wells, springs, etc.). The reliable potable water supply is calculated by adding together the maximum water supply capacity of surface sources, one-half of the maximum yield of wells or their pump capacities (unless otherwise indicated by the system manager), and a percentage of the average annual flow of spring sources. The percentage of the spring source flows ranges between 50% and 100%. The determination of the percentage is based on information obtained concerning the yearly fluctuations of the springs.

Figure 4, on page 15, graphically presents the relationship between the maximum potable water supply and the reliable potable water supply of a system. By quantifying the maximum and the reliable potable water supply of a system, the population that a system can potentially support can be determined. The current total yearly water use is the volume under the lower curve (*Present Water Use Pattern*). The future total yearly water use is the volume under the upper curve (*Future Water Use Pattern*). This total is equivalent to the reliable potable water supply.

The maximum water supply under present conditions is the volume under the upper line (Maximum Water Supply) in **Figure 4**. Because this amount is a yearly volume based upon a maximum daily flow rate (limited by the water right or system capacity), the line passes through the peak day demand point on the future water use curve (Future Peak Day Demand). Due to this, and the fact that most culinary water system storage tanks are designed to store only about one day's water demand, not all of the total maximum water supply is available to meet future water needs. Therefore,

the reliable water supply, rather than the maximum water supply, is the limiting factor in determining when future water demand equals current supplies.

Reliable secondary water supply is defined to be equal to the secondary use determined for each community system. The methodology for calculating secondary use is explained on page 17 under *Residential Use*.

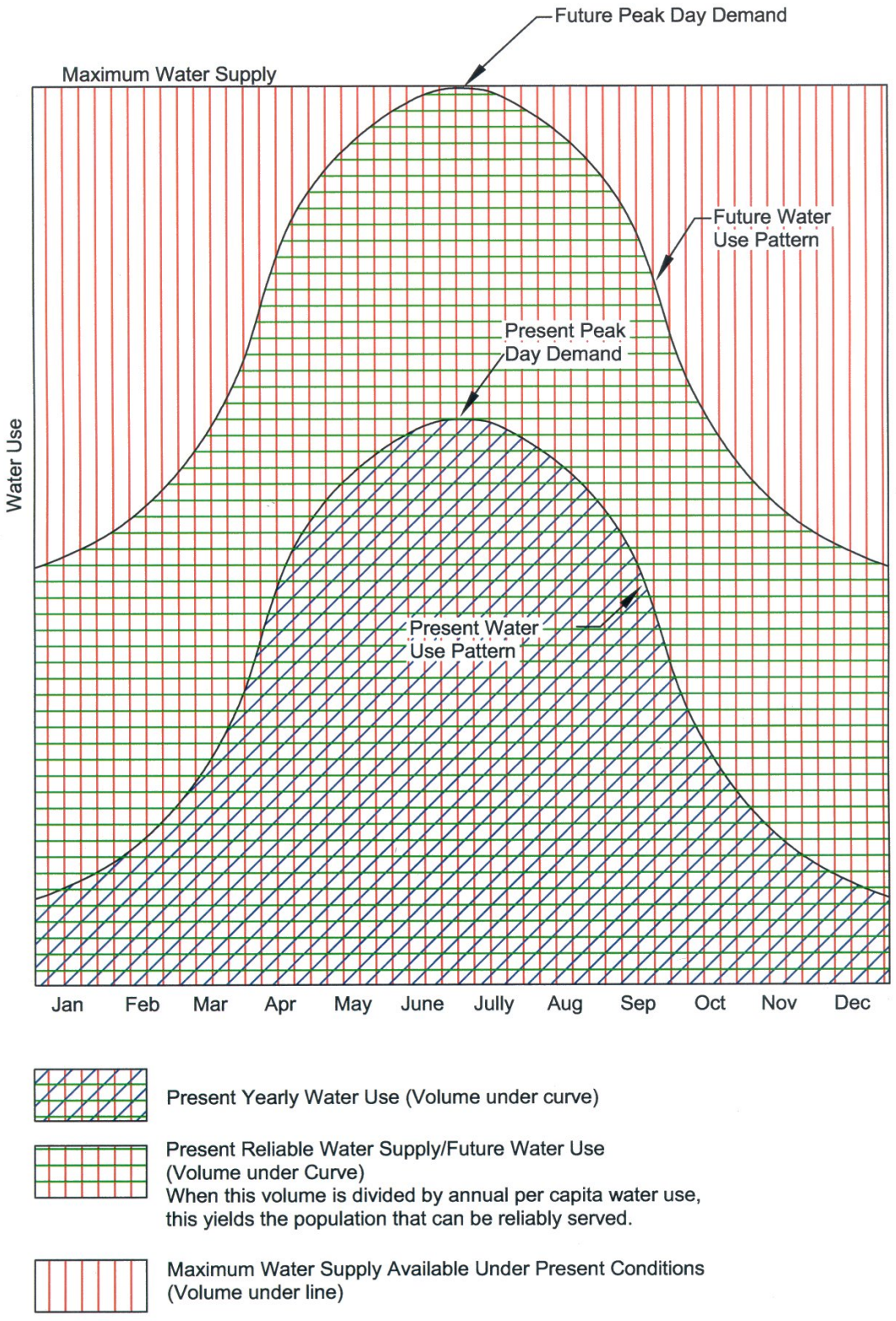


Figure 4. Water Supply and Use Hydrograph

Water Use

Present water use, as defined herein, is the developed water supply that is actually diverted into the distribution system from surface or subsurface sources. Water use is divided into four categories: residential, commercial, institutional and industrial. For comparative purposes, the DWRe chose these categories to correlate with the USGS categories of domestic, commercial, industrial, and mining.

The DWRe's residential category is equivalent to the USGS domestic category and includes water used for both indoor and outdoor purposes at residences. The USGS commercial category is equivalent to the DWRe's combined commercial and institutional categories. The DWRe's commercial category includes water use for retail establishments and businesses. The DWRe's institutional category includes water use for government facilities, military facilities, schools, hospitals, churches, parks, cemeteries, golf courses, etc. The DWRe's industrial category is equivalent to the combined USGS categories of industrial and mining that includes a wide variety of water uses associated with businesses that produce a specific product (including stockwatering).

Residential Use

The DWRe staff collects data about the number of residential connections and the amount of water used by those connections from a water system representative. Water use in this category is divided into three subcategories: culinary-outdoor, culinary-indoor, and secondary-outdoor. While most systems will meter the total residential water use, these subcategories are rarely metered separately. Therefore, the DWRe usually estimates these subcategory totals.

Typically, culinary indoor use will be estimated first. One method to estimate the indoor use is to review residential meter reading totals for the system from the winter months, if available. It can be assumed that the water used in winter months is for indoor use only, since outdoor watering does not typically occur during the winter months. This estimated indoor water use is then used to determine the total yearly indoor use.

When the above method does not yield a reasonable value for indoor use, the indoor use per capita water use for a system can be estimated by using an equation that was developed in a detailed residential study, "Identifying Residential Water Use", completed by the DWRe in 2001. The mathematical equation that was developed for per capita indoor water is as follows:

$$GPCD_{Indoor} = 90.3 / P_{PH} + 42.3$$

Where:

$GPCD_{Indoor}$ = Gallons per Capita Day (per capita indoor water use)

P_{PH} = Persons per Household (US Census Bureau)

The total yearly indoor water use is then calculated for the system by multiplying the result of the above equation by the current population. Outdoor culinary water use can then be estimated by subtracting the total yearly indoor water use from the given total residential culinary water use.

Because very few entities meter secondary outdoor water use, the DWRe staff estimates the outdoor secondary water use by using the average lot size, percent irrigated, percent of residences that are supplied by separate secondary (pressurized and ditch) irrigation systems, water right-duty rates (volume of water required for turf growth) in the area, and other related information for each system. In determining residential secondary use, care is taken to not include irrigation water use for small pastures or farm fields that can often be found adjacent to residences, particularly in rural communities.

Commercial Use

For most systems, the system operator can separate metered commercial water use data from the total water use. In cases where this data is not available or is extremely difficult to obtain, the DWRe staff attempts to estimate commercial water use by inventorying commercial businesses in the area and using published commercial water use estimates. The DDW and the Utah State Water Lab, among others, publish these estimates. In some rural communities where there are a relatively small number of commercial connections, the businesses are visited individually by DWRe staff and asked about their water use.

Some commercial facilities use secondary water to irrigate outside landscapes. This is especially typical for commercial golf courses. As is this cases many times, secondary water is not metered. The DWRe staff estimates this use by multiplying the size of the irrigated area by a water right-duty rate or the evapotranspiration rate (ET). The ET indicates the amount of water, in inches, necessary for turf growth.

Institutional Use

Institutional water use is water used for city, county, state and federal government facilities, parks, municipal golf courses, schools, hospitals, churches, military facilities, as well as fire hydrant testing and other municipal losses in the water system. Because this water use is often not metered, the process to acquire this data is difficult. Again, the system operator is asked to provide information about city facilities such as the number and size (irrigated acreage) of parks, schools, churches, and municipal golf courses. Water right-duty rates (and/or the ET) are used to calculate the amount of water is used to irrigate these areas. Estimates of leakage and water use for testing of water system facilities and are also included in this category.

Industrial Use

Industrial water use is defined as water used in the production of a product. Therefore, such commercial establishments as dairies, mink farms, and greenhouses, as well as stockwatering, are included in this category, provided a community water system serves them. Industrial water use within community water systems is acquired with the same process used to obtain commercial water use data discussed earlier.

Present Methodology for Non-Community Water Systems

DWRe staff attempts to contact each non-community system and/or make a personal visit to these systems. Non-community systems rarely meter their water use, so DWRe staff estimate their annual water use. Questions are asked to determine the type of facility, population served, water source information, irrigation of outside areas, etc. This data, along with information found in water-related publications, is used to determine water use. The maximum and reliable water supplies for these systems are often not available and are not in the scope of this study.

Present Methodology for Self-Supplied Industrial Water Systems

Although self-supplied industries are included in the Non-Community Water Systems category as defined by the DDW, the DWRe has separated them into their own category due to their importance. The category is equivalent to the DDW's Non-Community, Non-Transient category.

Water use is acquired for self-supplied industries by using data from the DWRi's Industrial Water Use Form and/or electronically submitted data. The DWRi collects annual water use data from most of the major self-supplied industrial water users in the state. This data is confidential. Therefore, the data presented in this M&I study is only

given as county totals. As with other non-community systems, the maximum and reliable water supplies are often not available and are not in the scope of this study.

Present Methodology for Private Domestic Water Systems

Private domestic systems are residences that are not connected to any public community or non-community water system. They are usually supplied by individual wells. To determine the water use data for this category, the population of those served by private domestic systems is estimated. This population is estimated by subtracting the population served by community water systems from the county population data acquired from the Governor's Office of Planning and Budget (GOPB). The remainder is assumed to be the population that is served by private domestic systems. The per capita water use rate for this category is assumed to be the same as the per capita water use rate for the public community system residential category for that county. To determine the total water use by private domestic systems, the estimated population is then multiplied by this rate. Again, the maximum and reliable water supplies for private wells are not in the scope of this study.

DEFINITIONS OF WATER TERMS

Water Supply Terms

Water is supplied by a variety of systems for many users. The general term supply is defined as the amount of water available. Municipalities own most of the individual water supply systems. However, in some cases the owner/operator is a private company or a state or federal agency. Thus, a "public" water supply may be either publicly or privately owned. Also, systems may supply treated or untreated water. Following are definitions of some terms used in this study:

Maximum Potable Water Supply - The annual volume of potable (culinary) water which is the lesser of the hydrologic capacity of the water source, the physical capacity of the water system, or the amount allowed by the collective water rights.

Reliable Potable Water Supply - The annual quantity of the maximum water supply that is available to meet peak demands. This is generally calculated as 100% of the maximum supply from surface water sources, 50% of the maximum yield of wells, and between 50% and 100% of the average annual spring flows. When this number is divided by the average per capita usage, the resulting number represents the theoretical maximum population that the water source can serve.

Municipal and Industrial (M&I) Water Supply - Includes all water (potable and non-potable) supplied for residential, commercial, institutional, light industry, and self-supplied industries. This supply is delivered by public community systems, public non-community (transient and non-transient) systems, self-supplied industrial systems, unregulated Indian water systems and private wells.

Potable Water Supply – Includes water meeting all applicable safe drinking water requirements for residential, commercial, institutional and industrial uses. It is sometimes referred to as culinary, or municipal, water supply.

Public Community Water Supply - Includes potable and non-potable water supplied by either privately or publicly owned community systems which serve at least 15 service connections or 25 individuals year round. Water from public community supplies may be used for both indoor and outdoor uses for residential, commercial, institutional, and industrial purposes.

Public Non-Community Water Supply - Includes potable and non-potable water supplied by either privately or publicly owned systems of two types: transient and non-transient. Transient systems are systems that do not serve 25 of the same non-resident persons per day for more than six months per year. Examples include campgrounds, RV parks, restaurants, convenience stores, etc. Non-transient systems are systems that regularly serve 25 of the same non-resident persons per day for more than six months per year. Examples include churches, schools and industries. This report lists the industrial non-transient systems as self-supplied industries.

Secondary Water Supply – Includes water not meeting safe drinking water requirements. Sometimes referred to as non-potable (non-culinary) water supply. This water is usually delivered by pressurized or open ditch water supply systems for irrigation of privately and publicly owned landscapes, gardens, parks, cemeteries, golf courses and other open areas. These systems, sometimes called "dual" water systems, are installed to provide an alternative to irrigating with culinary water for these outdoor areas. Irrigation companies often provide this water. However, some public community water systems may deliver this water as well. Self-supplied industries may also use secondary water for industrial processes.

Self-Supplied Industrial Supply - Includes potable and non-potable water supplied by individual privately owned industries (usually from their own wells or springs). This

category is the equivalent of the Utah Division of Drinking Water's (DDW) Non-Community, Non-Transient systems category.

Water Use Terms

Water is used in a variety of ways and for many purposes. It is often said that water is "used" when it is diverted, demanded, withdrawn, depleted or consumed. But it is also "used" in place for such things as fish and wildlife habitat, recreation and hydropower production. **Water use in this report is defined as "diverted" water.** However, a table that includes the basin's municipal and industrial water depletions is provided in Appendix E.

In most of the previous water supply terms the word "use" can be inserted where the word "supply" is written to define the current demand associated with those definitions. Some additional water use terms are as follows:

Commercial Use - Use normally associated with small business operations that may include drinking water, food preparation, personal sanitation, facility cleaning and maintenance and irrigation of facility landscapes. Examples include retail businesses, restaurants and hotels.

Industrial Use - Use associated with the manufacturing or production of products. The volume of water used by industrial businesses can be considerably greater than water used by commercial businesses. Examples include manufacturing plants, oil and gas producers, mining companies, mink farms and dairies.

Institutional Use - Use normally associated with general operation of various public agencies and institutions (i.e. schools, municipal buildings, churches) including drinking water, personal sanitation, facility cleaning and maintenance and irrigation of parks, cemeteries, playgrounds, recreational areas, golf courses, and other facilities. The

amount of water used by cities for outside irrigation of public areas typically is not metered.

Municipal and Industrial (M&I) Use - Use includes all residential, commercial, institutional, and industrial uses. It includes total uses (potable and non-potable) supplied by public water systems (community and non-community), self-supplied industries, private domestic systems, and secondary irrigation companies.

Private Domestic Use – Use includes water from private wells or springs for use in individual homes, usually in rural areas not accessible to public community water systems.

Residential Use - Use associated with residential cooking, drinking water, washing clothes, miscellaneous cleaning, personal grooming and sanitation, irrigation of lawns, gardens and landscapes, and washing automobiles, driveways and other outside residential facilities. Examples include single-family homes, apartments, duplexes and condominiums.

Other Water Terms

Consumption - Water evaporated, transpired or irreversibly bound in either a physical, chemical or biological process. Consumed water results in a loss of the original water supplied.

Consumptive Use - Losses of water brought about by human endeavors when used for residential, commercial, institutional, industrial, agricultural, power generation, and recreation. Naturally occurring vegetation and fish and wildlife also consumptively use water.

Depletion - Water consumed and made unavailable for return to a given designated area, river system or basin. It is intended to represent the net loss to a system. The terms consumption and depletion are often used interchangeably but are not the same. For example, water exported from a basin is depletion from the basin system but is not consumed in the basin. The exported water is available for use (consumption) in another basin or system. Water diverted to irrigate crops in a given system, but not returned for later use, is depletion. Precipitation that falls on irrigated crops is not considered a part of the supply like surface water and groundwater diversions. For this reason, precipitation falling on and consumed by irrigated crops is not considered as being depletion from the system.

Diversion - Water diverted from supply sources such as streams, lakes, reservoirs or groundwater for a variety of purposes, including cropland irrigation, as well as residential, commercial, institutional and industrial uses.

Withdrawal - Water withdrawn from supply sources such as lakes, streams, reservoirs or groundwater. This term is normally used in association with groundwater withdrawal. The terms *diversion* and *withdrawal* are often used interchangeably. **Water use as presented in this report deals with diversions.**

WATER RIGHTS IN THE UTAH LAKE BASIN

Starting with the Morse Decree of 1901, the waters of the Utah Lake Basin began to be legally quantified and regulated as a whole. The Morse Decree defined the water rights on the Jordan River with respect to each other. Soon following, the Booth Decree of 1909 addressed water supply in both the Utah Lake and the Jordan River by allowing additional appropriations of water from Utah Lake and setting a maximum diversion of 185,000 acre feet of water annually from the storage rights set forth in the Morse Decree.

In 1921, the Provo River Decree was issued dividing the Provo River System into two divisions and classifying most of the then current water rights. The Provo Division, which includes all the area below near the head of Provo Canyon, subdivided its water rights, by priority of date issued, into Classes A through J. The Wasatch Division, which includes all the area above the Provo Division, subdivided its water rights, by date priority, into Classes First (1^{st}) through Twentieth (20^{th}), and "Wasatch Division Power Rights".

In 1989 there were seven memorandum decisions issued by the State Engineer regarding change applications for the Welby and Jacob districts of the Provo River Project. These decisions made it possible for the then Salt Lake County Water Conservancy District (now entitled Jordan Valley Water Conservancy District) to transfer high quality Provo River water from the Utah Lake Basin for use in Salt Lake County. The water supply for the Welby and Jacob districts was replaced under both primary and secondary storage rights in Utah Lake.

In 2004 a Record of Decision was issued by the Federal Bureau of Reclamation authorizing the Utah Lake Water Delivery System (ULS) to deliver 30,000 acre feet of M&I water to northern Utah County communities. This water was made available through numerous negotiations, planning and scoping meetings, all in cooperation with

the Bureau of Reclamation's Central Utah Project (CUP), since the ULS was first announced in 1998. Design of the project is expected to begin in 2006, with construction estimated at ten years for completion. The ULS will be the final component of the Bonneville Unit of the CUP.

Between 1992 and 2006, there have been several water management plans issued by the State Engineer for most areas of the Utah Lake Basin. These plans include the Proposed Determination of Water Rights books published beginning in 1976 for Spanish Fork Canyon, Palmyra-Lake Shore and Hobble Creek-Springville areas, the Goshen Valley, Cedar Valley, Round Valley, the American Fork River, and the Pleasant Grove subdivision. The 1992 Utah Lake Interim Water Distribution Plan outlined the general surface water source and storage use and capacities of the basin. The 1995 Utah/Goshen Valley Ground-Water Management Plan outlines the available groundwater resources, current and proposed uses, as well as a categorical percentage breakdown of well pumpage.

To date and into the foreseeable future, all supplies of both surface and ground water are considered to be fully appropriated. However, some non-consumptive uses such as hydroelectric power generation will be considered on a per project basis.

JUAB COUNTY M&I WATER SUPPLIES AND USES

Only the extreme northeast portion of Juab County lies within the Utah Lake Basin. Within this portion of Juab County are the communities of Mona, Nephi, and Rocky Ridge Town. There are the mentioned three public communities with their own water systems, two public non-community water systems, and two self-supplied industries in the county. Locations of the public water systems are shown in **Figure 3** on page 9.

Shown in the following **Table 1,** the maximum annual potable water supply of the public community water systems in Juab County is 4,703 acre-feet: 1,934 acre-feet from springs and 2,769 acre-feet from wells. There are no surface supplies of water utilized in this portion of Juab County.

TABLE 1
JUAB COUNTY
Maximum Potable Water Supplies for Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	Total (Ac-Ft/Yr)
Mona	316.2	348.0	0.0	**664.2**
Nephi	1,618.0	2,300.0	0.0	**3,918.0**
Rocky Ridge Town	0.0	121.1	0.0	**121.1**
JUAB COUNTY TOTALS	**1,934.2**	**2,769.1**	**0.0**	**4,703.3**

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or system constraints.

The reliable annual potable water supply for public community systems in Juab County is 2,775 acre-feet, about sixty percent of the maximum supply. The breakdown of this supply is presented in the following **Table 2**.

TABLE 2
JUAB COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	SPRINGS	WELLS	SURFACE	TOTAL
Mona	185.7	348.0	0.0	**533.7**
Nephi	970.0	1,150.0	0.0	**2,120.0**
Rocky Ridge Town	0.0	121.1	0.0	**121.1**
JUAB COUNTY TOTALS	**1,155.7**	**1,619.1**	**0.0**	**2,774.8**

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.

Table 3, on the next page, is a breakdown of the potable water use for each of the public community water systems. The table shows a total annual potable water use of 1,693 acre-feet for all the public community water systems of the county. This current annual use is just over sixty percent of the reliable water supply.

TABLE 3
JUAB COUNTY
WATER USE FOR PUBLIC COMMMUNITY SYSTEMS

UTAH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	Total M & I		
Mona	73.6	116.0	5.0	15.0	0.0	**209.6**	925	202.3
Nephi	405.8	580.0	5.0	100.0	350.0	**1,440.8**	5,175	248.6
Rocky Ridge Town	23.2	15.5	0.6	3.0	0.7	**43.0**	300	128.0
JUAB COUNTY TOTALS	**502.6**	**711.5**	**10.6**	**118.0**	**350.7**	**1,693.4**	**6,400**	**236.2**
A	B	C	D	E	F	G	H	J

B, C, D, E, F, and H — These values are all input data.
G=B+C+D+E+F — This value represents only Potable M&I Water Use.
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H — Average per capita potable water use.

Secondary or non-potable water is another important aspect of municipal and industrial (M&I) water use. The following **Table 4** gives the annual amount of secondary water used for the various categorical uses within the boundaries of the each of the public community water systems. Each of the communities operates their own secondary water system. Total secondary water use for the public community water systems is 470 acre-feet per year.

TABLE 4
JUAB COUNTY
Secondary (Non-Potable) Water Use Within Public Community Systems
(Acre-Feet/Year)

JUAB COUNTY WATER SUPPLIER	Residential Use (Ac-Ft/Yr)	Commercial Use (Ac-Ft/Yr)	Institutional Use (Ac-Ft/Yr)	Industrial/ Stockwater Use (Ac-Ft/Yr)	Total Secondary Use (Ac-Ft/Yr)
Mona	120.0	0.0	0.0	0.0	**120.0**
Nephi	300.0	0.0	50.0	0.0	**350.0**
Rocky Ridge Town	0.0	0.0	0.0	0.0	**0.0**
JUAB COUNTY TOTALS	**420.0**	**0.0**	**50.0**	**0.0**	**470.0**

Various per capita water use rates for the public community water systems are given in the following **Table 5**.

TABLE 5
JUAB COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.190	169
Residential Potable Plus Secondary Use	0.255	228
Total Potable Use	0.265	236
Total Potable Plus Secondary Use	0.338	302

Note: Total Potable categories include residential, commercial, institiutional and industrial uses.

Table 6, on the following page, shows the water use for public non-community system and private domestic systems. There are two self-supplied industries and several private domestic wells. Collectively, these water systems annually use 212 acre-feet of potable water use and 190 acre-feet of secondary water use.

TABLE 6
JUAB COUNTY
Water Use for Public Non-Community Systems, Self-Supplied Industries and Private Domestic Systems

JUAB COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)					Total Secondary Water Use (Ac-Ft/Yr)
	Residential Use	Commercial Use	Institutional Use	Industrial Use	Total Potable Use	
Forest Service Systems:						
Bear Canyon Campground	0.0	0.0	1.5	0.0	**1.5**	**0.0**
Ponderosa Campground	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Non-Community Sub-Total	**0.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**
Self-Supplied Industries[1]	0.0	0.0	0.0	10.0	**10.0**	**190.0**
Private Domestic Systems	200.0	0.0	0.0	0.0	**200.0**	**0.0**
JUAB COUNTY TOTALS	**200.0**	**0.0**	**2.0**	**10.0**	**212.0**	**190.0**

[1]Includes Ash Grove Cement West, Inc. and Spring Canyon Energy, LLC

The combined total potable M&I water use of all categories of water systems in the county is 1,905 acre-feet, while secondary water use is 660 acre-feet; giving an overall total M&I water use of 2,565 acre-feet. With the 2003 population of Juab County at about 7,000, the total M&I per capita use for all water systems is then 327 gallons per capita per day. See **Appendix A** for more detailed data on each public community water system that is presented in the tables.

SUMMIT COUNTY M&I WATER SUPPLIES AND USES

The extreme northeast corner of the Utah Lake Basin encompasses a small part of Summit County and includes the communities of Francis and Woodland. In addition to these two public communities, there are six public non-community systems, but no self-supplied industries. The locations of most of these systems in Summit County are shown in **Figure 3** on page 9. **Appendix B** contains a detailed description of each of these public community water systems.

Table 7 shows that the maximum annual potable water supply for public community systems in Summit County is 700 acre-feet: 388 acre-feet from springs and 312 acre-feet from wells. Currently, there are no developed surface supplies of potable water in Summit County.

TABLE 7
SUMMIT COUNTY
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	TOTAL (Ac-Ft/Yr)
Francis Town Water System	344.0	294.0	0.0	**638.0**
Woodland Mutual Water Co.	44.2	17.6	0.0	**61.8**
SUMMIT COUNTY TOTALS	**388.2**	**311.6**	**0.0**	**699.8**

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or system constraints.

The reliable potable water supply for public community systems in Summit County is 401 acre-feet or about 57 percent of the maximum annual water supply. The breakdown of this supply is presented in the following **Table 8**.

TABLE 8
SUMMIT COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	TOTAL (Ac-Ft/Yr)
Francis Town Water System	176.6	172.0	0.0	**348.6**
Woodland Mutual Water Co.	44.2	8.4	0.0	**52.6**
SUMMIT COUNTY TOTALS	**220.8**	**180.4**	**0.0**	**401.2**

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.

Table 9 shows a breakdown of the potable water use for each public community system. This table shows that for Summit County the current annual potable water use of public community water systems is 246 acre-feet, about 61 percent of the current reliable annual potable water supply.

TABLE 9
SUMMIT COUNTY
WATER USE FOR PUBLIC COMMUNITY SYSTEMS

UTAH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	Total M & I		
Francis Town Water System	52.6	100.0	0.5	20.0	0.0	**173.1**	690	224.0
Woodland Mutual Water Co.	16.7	40.1	6.1	5.0	5.0	**72.9**	200	325.4
SUMMIT COUNTY TOTALS	**69.3**	**140.1**	**6.6**	**25.0**	**5.0**	**246.0**	**890**	**246.8**
A	B	C	D	E	F	G	H	J

B, C, D, E, F, and H — These values are all input data.
G=B+C+D+E+F — This value represents only Potable M&I Water Use.
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H — Average per capita potable water use.

Secondary water is another important aspect of municipal and industrial (M&I) water use. **Table 10** gives the annual amount of secondary water used for various categorical uses within the boundaries of the public community systems. In the town of Francis, three separate irrigation companies provide secondary water to customers within the community. Woodland Mutual Water Company supplies both culinary and secondary water to the town of Woodland. Total secondary water use for the public community water systems is 65 acre-feet.

TABLE 10
SUMMIT COUNTY
SECONDARY WATER USE WITHIN PUBLIC COMMUNITY SYSTEMS
(Acre-Feet/Year)

SUMMIT COUNTY WATER SUPPLIER	Residential Use (Ac-Ft/Yr)	Commercial Use (Ac-Ft/Yr)	Institutional Use (Ac-Ft/Yr)	Industrial/ Stockwater Use (Ac-Ft/Yr)	Total Secondary Use (Ac-Ft/Yr)
Francis Town Water System					
Washington Irrigation Co.	30.0	0.0	10.0	0.0	**40.0**
South Kamas Irrigation Co.	10.0	0.0	0.0	0.0	**10.0**
Beaver-Shingle Creek Irrig. Co.	10.0	0.0	0.0	0.0	**10.0**
Woodland Mutual Water Co.*	5.0	0.0	0.0	0.0	**5.0**
SUMMIT COUNTY TOTALS	**55.0**	**0.0**	**10.0**	**0.0**	**65.0**

Note: Separate irrigation companies provide secondary water to the water supplier unless indicated by an '*'.

Various per capita rates for the public community systems of Summit County are shown in the following **Table 11**. **Appendix B** shows further detail of the data for each public community system that is presented in the tables.

TABLE 11
SUMMIT COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.235	210
Residential Potable Plus Secondary Use	0.297	265
Total Potable Use	0.276	247
Total Potable Plus Secondary Use	0.349	312

Note: Total Potable categories include residential, commercial, institiutional and industrial uses.

Table 12, on the following page, shows the annual water use for public non-community systems, self-supplied industries, and private domestic systems. The total water use of these water systems is 14 acre-feet of potable water and 10 acre-feet of secondary water use.

TABLE 12
SUMMIT COUNTY
Water Use for Public Non-Community Systems,
Self-Supplied Industries and Private Domestic Systems
(Acre-Feet/Year)

SUMMIT COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)					Total Secondary Water Use (Ac-Ft/Yr)
	Residential Use	Commercial Use	Institutional Use	Industrial Use	Total Potable Use	
Camperworld Knotty Pine	0.3	0.0	0.0	0.0	**0.3**	0.0
Diamond Bar X	0.0	0.0	0.0	0.0	**0.0**	0.0
Forest Service Systems:	0.0	0.0	0.0	0.0	**0.0**	0.0
Lost Creek-Lily Lake CG	0.0	0.0	0.2	0.0	**0.2**	0.0
Shady Dell/Soapstone CG	0.0	0.0	0.1	0.0	**0.1**	0.0
Trial Lake CG	0.0	0.0	0.5	0.0	**0.5**	0.0
Lemon Grove	3.0	0.0	0.0	0.0	**3.0**	10.0
Non-Community Sub-Total	**3.3**	**0.0**	**0.8**	**0.0**	**4.1**	**10.0**
Self Supplied Industries[1]	0.0	0.0	0.0	0.0	**0.0**	0.0
Private Domestic Use	10.0	0.0	0.0	0.0	**10.0**	0.0
SUMMIT COUNTY	**13.3**	**0.0**	**0.8**	**0.0**	**14.1**	**10.0**

[1]There are no self supplied industries

Total potable M&I water use for all categories of water systems in the county is then 260 acre-feet, while non-potable use is 75 acre-feet. The overall total annual M&I water use is then 335 acre-feet. With the 2003 population of this portion of Summit County at about 920 people, the combined M&I per capita water use of all water systems for the county is then 325 gallons per capita per day.

UTAH COUNTY M&I WATER SUPPLIES AND USES

With the exception of the southeast tip of Utah County, the county is entirely contained within the Utah Lake Basin. Additionally, the county comprises most of the land area of the basin. Within Utah County there are 35 community water systems, 41 non-community water systems, 10 self-supplied industries and over 4000 private wells. Locations of most of these systems are shown in **Figure 3** on page 9. **Appendix C** contains a detailed description of the public community water systems.

Table 13, on the following page, shows that the maximum annual potable water supply for public community systems in Utah County is 322,407 acre-feet; 49,284 acre-feet from springs, 154,423 acre-feet from wells, and 118,700 acre-feet from surface supplies. Additional future supplies are anticipated to be over 70,000 acre-feet, bringing total future supplies to almost 400,000 acre-feet annually.

The reliable potable water supply for Utah County is currently figured to be about 152,575 acre-feet. **Table 14** on page 43 indicates that of this total, 32,215 acre-feet are from springs, 91,010 acre-feet from wells, and 29,350 acre-feet from surface supplies. The reliability of the additional future supplies is not yet known.

Following, **Table 15** on pages 44 and 45 shows a breakdown of the total potable water use for each public community water system. The table indicates that for Utah County the current annual potable water use for public community water systems is 95,268 acre-feet. This current annual use is about sixty-two percent of the estimated reliable water supply.

TABLE 13
UTAH COUNTY
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	Total (Ac-Ft/Yr)
Alpine	2,172.0	2,845.3	0.0	**5,017.3**
Alpine Cove Water SSD	0.0	91.2	0.0	**91.2**
American Fork City	2,000.0	31,000.0	0.0	**33,000.0**
Bradford Acres Water Assoc.	0.0	83.9	0.0	**83.9**
Cedar Fort	362.0	0.0	0.0	**362.0**
Cedar Hills	0.0	858.0	0.0	**858.0**
Central Utah WCD - Utah Valley[1]	0.0	0.0	89,600.0	**89,600.0**
Covered Bridge Canyon	0.0	98.0	0.0	**98.0**
Eagle Mountain Town	0.0	1,145.4	0.0	**1,145.4**
Elberta	0.0	50.8	0.0	**50.8**
Elk Ridge	0.0	1,071.4	0.0	**1,071.4**
Fairfield Irrigation Company	96.7	0.0	0.0	**96.7**
Genola	0.0	871.0	0.0	**871.0**
Goosenest Water Company	43.6	84.9	0.0	**128.5**
Goshen	645.2	0.0	0.0	**645.2**
Hidden Creek Water Company	0.0	724.0	0.0	**724.0**
Highland Water Company	0.0	5,645.5	0.0	**5,645.5**
Lehi	524.2	3,903.5	0.0	**4,427.7**
Lindon	204.9	5,532.6	0.0	**5,737.5**
Manila Culinary Water Company	282.4	1,556.2	0.0	**1,838.6**
Mapleton	1,903.3	4,718.0	0.0	**6,621.3**
Metropolitan Water District of Orem[2]	0.0	0.0	17,350.0	**17,350.0**
Metropolitan Water District of Provo[3]	300.0	150.0	8,750.0	**9,200.0**
North Fork SSD	620.8	0.0	0.0	**620.8**
Orem City	2,984.0	18,306.0	0.0	**21,290.0**
Payson	1,500.0	5,800.0	0.0	**7,300.0**
Pleasant Grove City	1,500.0	13,000.0	0.0	**14,500.0**
Provo City	12,000.0	37,500.0	3,000.0	**52,500.0**
Salem	905.0	2,235.8	0.0	**3,140.8**
Santaquin City	1,500.0	1,600.0	0.0	**3,100.0**
Saratoga Spring Municipal	0.0	905.0	0.0	**905.0**
Spanish Fork	12,762.4	1,935.6	0.0	**14,698.0**
Spring Lake	144.8	528.5	0.0	**673.3**
Springdell Plat A & B	206.5	0.0	0.0	**206.5**
Springville City	6,290.7	8,426.4	0.0	**14,717.1**
Utah State Hospital	250.0	725.9	0.0	**975.9**
White Hills Subdivision	0.0	2,783.0	0.0	**2,783.0**
Woodland Hills	85.0	247.4	0.0	**332.4**
				0.0
UTAH COUNTY TOTALS	**49,283.5**	**154,423.3**	**118,700.0**	**322,406.8**

Notes:

1. The supply shown is the current design capacity of the treatment plant (expandable to 112,000). Current plant deliveries total about 24,250 acre feet. Additional future supplies include 30,000 acre feet from the Utah Lake System and 42,000 acre feet of recently purchased water rights from the former Geneva Steel site.
2. Metropolitan Water District of Orem wholesales water to Orem City. The supply shown is their current Provo River water rights.
3. Metropolitan Water District of Provo wholesales water to Provo City. The supply shown is their current total water rights.
4. All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or system constraints.

TABLE 14
UTAH COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	TOTAL (Ac-Ft/Yr)
Alpine	2,172.0	1,629.2	0.0	**3,801.2**
Alpine Cove Water SSD	0.0	91.2	0.0	**91.2**
American Fork City	2,000.0	20,000.0	0.0	**22,000.0**
Bradford Acres Water Assoc.	0.0	83.9	0.0	**83.9**
Cedar Fort	227.5	0.0	0.0	**227.5**
Cedar Hills	0.0	858.0	0.0	**858.0**
Central Utah WCD - Utah Valley[2]	0.0	0.0	13,300.0	**13,300.0**
Covered Bridge Canyon	0.0	98.0	0.0	**98.0**
Eagle Mountain Town	0.0	1,145.4	0.0	**1,145.4**
Elberta	0.0	50.8	0.0	**50.8**
Elk Ridge	0.0	920.0	0.0	**920.0**
Fairfield Irrigation Company	96.7	0.0	0.0	**96.7**
Genola	0.0	435.5	0.0	**435.5**
Goosenest Water Company	43.6	84.9	0.0	**128.5**
Goshen	387.1	0.0	0.0	**387.1**
Hidden Creek Water Company	0.0	724.0	0.0	**724.0**
Highland Water Company	0.0	2,823.0	0.0	**2,823.0**
Lehi	524.2	1,952.0	0.0	**2,476.2**
Lindon	123.0	2,766.3	0.0	**2,889.3**
Manila Culinary Water Company	120.0	778.1	0.0	**898.1**
Mapleton	1,142.0	2,359.0	0.0	**3,501.0**
Metropolitan Water District of Orem[3]	0.0	0.0	8,675.0	**8,675.0**
Metropolitan Water District of Provo[4]	150.0	75.0	4,375.0	**4,600.0**
North Fork SSD	581.7	0.0	0.0	**581.7**
Orem City	1,790.0	12,540.0	0.0	**14,330.0**
Payson	900.0	2,900.0	0.0	**3,800.0**
Pleasant Grove City	1,500.0	6,500.0	0.0	**8,000.0**
Provo City	7,000.0	18,750.0	3,000.0	**28,750.0**
Salem	543.0	2,110.0	0.0	**2,653.0**
Santaquin City	900.0	800.0	0.0	**1,700.0**
Saratoga Spring Municipal	0.0	905.0	0.0	**905.0**
Spanish Fork	7,782.7	967.8	0.0	**8,750.5**
Spring Lake	86.9	329.0	0.0	**415.9**
Springdell Plat A & B	123.9	0.0	0.0	**123.9**
Springville City	3,774.4	6,390.0	0.0	**10,164.4**
Utah State Hospital	150.0	362.9	0.0	**512.9**
White Hills Subdivision	0.0	1,391.5	0.0	**1,391.5**
Woodland Hills	96.6	189.5	0.0	**286.1**
UTAH COUNTY TOTALS	**32,215.3**	**91,010.0**	**29,350.0**	**152,575.3**

Notes:

1. All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.
2. Central Utah WCD currently wholesales 3,000 a.f. and 10,300 a.f. of water to Provo and Orem Cities, respectively, through their Utah Valley Water Treatment Plant. Additional future supplies include 30,000 acre feet from the Utah Lake System and 42,000 acre feet of recently purchased water rights from the former Geneva Steel site.
3. Metropolitan Water District of Orem wholesales water to the City of Orem.
4. Metropolitan Water District of Provo wholesales water to the City of Provo.

TABLE 15
UTAH COUNTY
WATER USE FOR PUBLIC COMMUNITY SYSTEMS

UTAH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	Total M & I		
Alpine	567.2	267.3	25.3	18.4	24.8	**903.0**	8,000	100.8
Alpine Cove Water SSD	14.9	59.0	0.0	0.0	1.0	**74.9**	210	318.4
American Fork City	1,766.3	2,782.1	1,473.2	3,689.1	0.0	**9,710.7**	23,500	368.9
Bradford Acres Water Assoc.	3.0	0.0	0.0	0.0	0.0	**3.0**	40	67.0
Cedar Fort	26.4	50.6	2.0	20.0	0.0	**99.0**	360	245.5
Cedar Hills	500.0	275.0	2.0	5.0	0.0	**782.0**	7,000	99.7
Covered Bridge Canyon	20.0	40.0	0.0	4.0	0.0	**64.0**	280	204.1
Eagle Mountain Town	687.4	683.8	15.0	922.6	0.0	**2,308.8**	9,500	217.0
Elberta	21.3	19.2	0.0	4.0	0.0	**44.5**	280	141.9
Elk Ridge	134.6	304.9	0.0	0.0	0.0	**439.5**	1,920	204.4
Fairfield Irrigation Company	3.0	2.0	0.0	1.0	2.0	**8.0**	100	71.4
Genola	87.5	40.0	0.5	2.0	130.0	**260.0**	1,100	211.0
Goosenest Water Company	8.4	29.2	0.0	0.0	0.0	**37.6**	110	305.2
Goshen	69.4	78.7	1.0	29.1	25.5	**203.7**	880	206.6
Hidden Creek Water Company	2.5	6.5	0.0	0.0	0.0	**9.0**	30	267.8
Highland Water Company	696.7	109.4	53.5	250.0	21.8	**1,131.4**	10,000	101.0
Lehi	2,118.2	0.0	253.4	250.0	25.0	**2,646.6**	28,350	83.3
Lindon	674.1	200.0	200.0	150.0	200.0	**1,424.1**	9,500	133.8
Manila Culinary Water Company	214.4	858.1	33.9	22.6	0.0	**1,129.0**	2,900	347.6
Mapleton	475.0	1,045.0	10.6	16.1	8.4	**1,555.1**	6,490	213.9

(table continued on following page)

TABLE 15 (Cont.)
UTAH COUNTY
WATER USE FOR PUBLIC COMMUNITY SYSTEMS

UTAH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	Total M & I		
North Fork SSD	50.0	100.0	105.0	50.0	0.0	**305.0**	200	1,361.4
Orem City	6,771.3	8,841.8	3,000.0	2,000.0	550.0	**21,163.1**	88,900	212.5
Payson	1,142.5	26.4	170.0	260.0	40.0	**1,638.9**	15,000	97.5
Pleasant Grove City	1,850.0	2,730.0	515.0	343.3	171.7	**5,610.0**	25,000	200.3
Provo City	8,627.8	9,910.7	7,101.0	3,369.0	725.0	**29,733.5**	111,630	237.8
Salem	375.0	830.0	30.0	115.0	15.0	**1,365.0**	4,900	248.7
Santaquin City	435.3	406.5	45.0	15.0	10.0	**911.8**	5,800	140.3
Saratoga Spring Municipal	450.0	140.0	5.0	45.0	0.0	**640.0**	6,000	95.2
Spanish Fork	1,751.9	363.0	416.2	846.4	212.9	**3,590.4**	23,000	139.4
Spring Lake	33.0	66.0	2.0	5.0	10.0	**116.0**	430	240.8
Springdell Plat A & B	7.6	13.0	0.0	1.5	0.0	**22.1**	100	197.3
Springville City	1,855.0	1,986.6	890.3	190.3	1,945.0	**6,867.2**	24,000	255.4
Utah State Hospital	0.0	0.0	0.0	175.0	0.0	**175.0**	500	312.5
White Hills Subdivision	30.0	75.0	1.0	0.0	0.0	**106.0**	400	236.6
Woodland Hills	87.4	92.2	0.0	10.0	0.0	**189.6**	1,200	141.1
UTAH COUNTY TOTALS	**31,557.1**	**32,432.0**	**14,350.9**	**12,809.4**	**4,118.1**	**95,267.5**	**417,610.0**	**203.7**
A	B	C	D	E	F	G	H	J

B, C, D, E, F, and H — These values are all input data.
G=B+C+D+E+F — This value represents only Potable M&I Water Use.
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H — Average per capita potable water use.

Secondary (non-potable) water is another important aspect of total M&I water use. **Table 16** shows the amount of secondary water use within the public community water systems boundaries. Total secondary water use in Utah County is 25,429 acre-feet.

TABLE 16
UTAH COUNTY
Secondary Water Use Within Public Community Systems
(Acre-Feet/Year)

UTAH COUNTY WATER SUPPLIER	Residential Use (Ac-Ft/Yr)	Commercial Use (Ac-Ft/Yr)	Institutional Use (Ac-Ft/Yr)	Industrial/ Stockwater Use (Ac-Ft/Yr)	Total Secondary Use (Ac-Ft/Yr)
Alpine	1,900.0	22.0	200.0	0.0	**2,122.0**
Alpine Cove Water SSD	0.0	0.0	0.0	0.0	**0.0**
American Fork City	200.0	300.0	0.0	0.0	**500.0**
Bradford Acres Water Assoc.	15.0	0.0	0.0	0.0	**15.0**
Cedar Fort	20.0	0.0	0.0	0.0	**20.0**
Cedar Hills	500.0	240.0	50.0	0.0	**790.0**
Covered Bridge Canyon	0.0	0.0	0.0	0.0	**0.0**
Eagle Mountain Town	0.0	0.0	0.0	0.0	**0.0**
Elberta	20.0	0.0	6.0	0.0	**26.0**
Elk Ridge	0.0	0.0	0.0	0.0	**0.0**
Fairfield Irrigation Company	3.0	0.0	20.0	2.0	**25.0**
Genola	250.0	0.0	70.0	0.0	**320.0**
Goosenest Water Company	0.0	0.0	0.0	0.0	**0.0**
Goshen	100.0	0.0	18.0	0.0	**118.0**
Hidden Creek Water Company	0.0	0.0	0.0	0.0	**0.0**
Highland Water Company	2,500.0	300.0	200.0	0.0	**3,000.0**
Lehi	4,300.0	500.0	200.0	0.0	**5,000.0**
Lindon	900.0	50.0	400.0	0.0	**1,350.0**
Manila Culinary Water Company	0.0	0.0	0.0	0.0	**0.0**
Mapleton	400.0	0.0	0.0	0.0	**400.0**
North Fork SSD	0.0	0.0	0.0	0.0	**0.0**
Orem City	172.0	120.0	0.0	0.0	**292.0**
Payson	2,500.0	250.0	200.0	0.0	**2,950.0**
Pleasant Grove City	250.0	0.0	100.0	50.0	**400.0**
Provo City	1,100.0	600.0	675.0	60.0	**2,435.0**
Salem	100.0	0.0	0.0	0.0	**100.0**
Santaquin City	200.0	0.0	100.0	0.0	**300.0**
Saratoga Spring Municipal	300.0	300.0	0.0	0.0	**600.0**
Spanish Fork	3,200.0	100.0	500.0	100.0	**3,900.0**
Spring Lake	30.0	0.0	8.0	0.0	**38.0**
Springdell Plat A & B	0.0	0.0	0.0	0.0	**0.0**
Springville City	350.0	0.0	253.0	50.0	**653.0**
Utah State Hospital	0.0	0.0	75.0	0.0	**75.0**
White Hills Subdivision	0.0	0.0	0.0	0.0	**0.0**
Woodland Hills	0.0	0.0	0.0	0.0	**0.0**
UTAH COUNTY TOTALS	**19,310.0**	**2,782.0**	**3,075.0**	**262.0**	**25,429.0**

Table 17 gives various gallons per capita per day water use rates for the public community systems. **Appendix C** shows detailed data for the public community water systems of Utah County that are presented in the tables.

TABLE 17
UTAH COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.153	137
Residential Potable Plus Secondary Use	0.199	178
Total Potable Use	0.228	204
Total Potable Plus Secondary Use	0.289	258

Note: Total Potable categories include residential, commercial, instiitiutional and industrial uses.

Table 18, on the following page, indicates the water use for public non-community systems and private domestic systems. Utah Lake State Park facilities, several summer and year-round developments, campgrounds, and other park facilities are among the 41 non-community systems. There are ten self-supplied industries in Utah County. All these uses amount to 5,952 acre-feet of potable water and 9,728 acre-feet of non-potable water.

TABLE 18
UTAH COUNTY
Water Use for Public Non-Community Systems, Self-Supplied Industries and Private Domestic Systems (Acre-Feet/Year)

UTAH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)					Total Secondary Water Use (Ac-Ft/Yr)
	Residential Use	Commercial Use	Institutional Use	Industrial Use	Total Potable Use	
Brickerhaven Subdivision	2.0	0.0	0.0	0.0	**2.0**	**0.0**
Christian Assembly	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Diamond Fork Creek-CG	0.0	0.5	0.0	0.0	**0.5**	**0.0**
Forest Service Systems:						
American Fork Recreation Site	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Balsam Campground	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Blackhawk Campground	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Cherry Picnic Site	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Granite Flat Campground	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Hope Campground	0.0	0.0	0.3	0.0	**0.3**	**0.0**
Maple Bench Campground	0.0	0.0	0.3	0.0	**0.3**	**0.0**
Payson Lakes Campground	0.0	0.0	5.0	0.0	**5.0**	**0.0**
Theater In Pines & Mt. Timp.	0.0	0.0	0.2	0.0	**0.2**	**0.0**
Timpooneke Campground/GS	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Tinney Flat Campground	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Whiting Campground	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Jehovahs' Witness Church	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Jolley Park	0.0	0.0	2.0	0.0	**2.0**	**8.0**
LDS Church Facilities:						
Benjamin Ward	0.0	0.0	2.7	0.0	**2.7**	**0.0**
Bennion Creek Campground	0.0	0.0	0.2	0.0	**0.2**	**0.0**
Deseret Feed Lot	0.0	0.0	0.0	180.0	**180.0**	**0.0**
Lake Shore Ward	0.0	0.0	2.7	0.0	**2.7**	**0.0**
Mutual Dell Recreation	0.0	0.0	2.0	0.0	**2.0**	**0.0**
Palmyra LDS Ward	0.0	0.0	2.2	0.0	**2.2**	**0.0**
Payson W Stake 12/13 Wards	0.0	0.0	1.0	0.0	**1.0**	**8.0**
Loafer Water Users Association	1.0	0.0	0.0	0.0	**1.0**	**0.0**
New Haven Girls East Home	0.0	2.0	0.0	0.0	**2.0**	**3.0**
New Haven Girls Saratoga	0.0	2.0	0.0	0.0	**2.0**	**3.0**
New Haven Girls West Home	0.0	2.0	0.0	0.0	**2.0**	**3.0**
Silver Lake Summer Homes	1.0	0.0	0.0	0.0	**1.0**	**0.0**
Soldier Summit SSD	0.2	0.3	0.0	0.0	**0.5**	**0.0**
State of Utah:						
Tucker Rest Area	0.0	0.0	0.5	0.0	**0.5**	**1.0**
Utah Lake State Park	0.0	0.0	5.0	0.0	**5.0**	**0.0**
Tibble Fork Summer Homes	2.0	0.0	0.0	0.0	**2.0**	**0.0**
Timpanogos Visitor Center	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Upper Whittemore Water Co.	3.0	0.0	0.0	0.0	**3.0**	**0.0**
Utah County Facilities:						
Benjamin Park	0.0	0.0	10.5	0.0	**10.5**	**0.0**
Lincoln Beach	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Willow Park	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Vivian Park Homeowners	1.0	0.0	0.0	0.0	**1.0**	**0.0**
Wildwood Subdivision	25.0	0.0	0.0	0.0	**25.0**	**0.0**
Non-Community Sub-Total	**35.2**	**6.8**	**56.1**	**180.0**	**278.1**	**26.0**
Self-Supplied Industries[1]	0.0	0.0	0.0	675.0	**675.0**	**9,702.0**
Private Domestic Use	5,000.0	0.0	0.0	0.0	**5,000.0**	**0.0**
UTAH COUNTY TOTALS	**5,035.2**	**6.8**	**56.1**	**855.0**	**5,953.1**	**9,728.0**

[1] Includes Air Liquide American Corp., Dyno Nobel, Inc., Ensign-Bickford Co., Geneva Rock Products, Rebecca R. Hammond, Micron Technology, Inc., Muir-Roberts Co., Inc., Pacific States Cast Iron Pipe Co., Payson Fruit Grower's, Inc. and Utah Refractories Corp.

Total potable M&I water use for all categories of water systems in the county is then 101,220 acre-feet, while total non-potable water use is 35,157 acre-feet, giving a total overall M&I water use in 2003 of about 136,377 acre-feet for Utah County. Since the current population of Utah County is about 423,300, the total M&I per capita water use in Utah County is then 288 gallons per capita per day (gpcd).

WASATCH COUNTY M&I WATER SUPPLIES AND USES

The Utah Lake Basin encompasses the land area of northwestern Wasatch County, generally the Heber Valley. Within this area are 15 public community systems and 26 public non-community systems. There are no self-supplied industries in this part of the county. Locations of most of these water systems are shown in **Figure 3** on page 9.

As shown in **Table 19**, the maximum annual potable water supply for the public community systems of Wasatch County in the Utah Lake Basin is 14,595 acre-feet; 6,718 acre-feet from springs, 3,377 acre-feet from wells, and 4,500 acre-feet from surface sources.

TABLE 19
WASATCH COUNTY
Maximum Potable Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	TOTAL (Ac-Ft/Yr)
Canyon Meadows	161.0	72.0	0.0	**233.0**
Center Creek Water System	80.7	0.0	0.0	**80.7**
Charleston WCD	72.6	97.7	0.0	**170.3**
Country Estates Mobile Homes	0.0	64.6	0.0	**64.6**
Daniel Domestic Water Company	235.5	0.0	0.0	**235.5**
Heber City Water System	2,887.3	2,259.3	0.0	**5,146.6**
Interlaken Mutual Water Company	0.0	364.5	0.0	**364.5**
Jordanelle SSD	0.0	300.0	4,000.0	**4,300.0**
Midway City Water System	2,843.0	54.8	0.0	**2,897.8**
Storm Haven	0.0	60.0	0.0	**60.0**
Swiss Alpine Water Co.	31.2	0.0	0.0	**31.2**
Timber Lakes Water SSD	320.0	0.0	0.0	**320.0**
Twin Creeks SSD	0.0	0.0	500.0	**500.0**
Wallsburg Town Water System	87.1	66.9	0.0	**154.0**
Woodland South Hills Irrigation	0.0	37.0	0.0	**37.0**
WASATCH COUNTY TOTALS	**6,718.4**	**3,376.8**	**4,500.0**	**14,595.2**

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or system constraints.

The reliable potable water supply shown in the following **Table 20** is 10,492 acre-feet, about 75 percent of the maximum supply.

TABLE 20
WASATCH COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	TOTAL (Ac-Ft/Yr)
Canyon Meadows	114.4	72.0	0.0	**186.4**
Center Creek Water System	48.4	0.0	0.0	**48.4**
Charleston WCD	43.6	97.7	0.0	**141.3**
Country Estates Mobile Homes	0.0	32.3	0.0	**32.3**
Daniel Domestic Water Company	141.3	0.0	0.0	**141.3**
Heber City Water System	1,732.4	1,130.0	0.0	**2,862.4**
Interlaken Mutual Water Company	0.0	182.2	0.0	**182.2**
Jordanelle SSD	0.0	150.0	4,000.0	**4,150.0**
Midway City Water System	1,815.0	27.4	0.0	**1,842.4**
Storm Haven	0.0	44.0	0.0	**44.0**
Swiss Alpine Water Co.	31.2	0.0	0.0	**31.2**
Timber Lakes Water SSD	192.0	0.0	0.0	**192.0**
Twin Creeks SSD	0.0	0.0	500.0	**500.0**
Wallsburg Town Water System	52.3	66.9	0.0	**119.2**
Woodland South Hills Irrigation	0.0	18.5	0.0	**18.5**
WASATCH COUNTY TOTALS	**4,170.6**	**1,821.0**	**4,500.0**	**10,491.6**

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.

Table 21 on the following page presents the breakdown of the potable water use for each public community system of the county. As indicated by the table, the current total annual potable water use is 3,239 acre-feet, which is about 31 percent of the current reliable potable water supply

TABLE 21
WASATCH COUNTY
WATER USE FOR PUBLIC COMMUNITY SYSTEMS

WASATCH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	Total M & I		
Canyon Meadows	4.0	7.0	0.0	5.0	0.0	**16.0**	40	357.1
Center Creek Culinary Water Co.	13.2	15.2	0.0	0.0	0.0	**28.4**	150	169.0
Charleston WCD	42.2	89.8	0.5	2.5	15.0	**150.0**	520	257.5
Country Estates Mobile Homes	11.2	0.0	0.0	0.0	0.0	**11.2**	200	50.0
Daniel Domestic Water Company	28.6	44.5	0.0	0.0	0.1	**73.2**	340	192.2
Heber City Water System	687.1	811.9	293.4	134.0	34.6	**1,961.0**	8,640	202.6
Interlaken Mutual Water Company	24.2	26.9	0.0	0.0	0.0	**51.1**	270	169.0
Jordanelle Special Service District	91.4	66.6	5.8	5.0	0.0	**168.8**	1,200	125.6
Midway City Water System	194.5	235.0	45.0	10.0	40.0	**524.5**	2,480	188.8
Storm Haven	10.5	7.0	0.0	0.0	0.0	**17.5**	110	142.0
Swiss Alpine Water Co.	21.0	10.0	0.0	0.0	0.0	**31.0**	300	92.3
Timber Lakes Water SSD	80.0	0.0	0.0	0.0	0.0	**80.0**	1,000	71.4
Twin Creeks SSD	54.1	5.8	0.0	0.0	0.0	**59.9**	710	75.3
Wallsburg Town Water System	33.0	20.0	0.1	3.5	0.0	**56.6**	460	109.8
Woodland South Hills Irrigation	4.0	5.3	0.0	0.0	0.2	**9.5**	60	141.4
WASATCH COUNTY TOTALS	**1,299.0**	**1,345.0**	**344.8**	**160.0**	**89.9**	**3,238.7**	**16,480.0**	**175.4**
A	B	C	D	E	F	G	H	J

B, C, D, E, F, and H — These values are all input data.
G=B+C+D+E+F — This value represents only Potable M&I Water Use.
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H — Average per capita potable water use.

Secondary water is another important aspect of municipal and industrial (M&I) water use. **Table 22** shows the amount of secondary water use within the public community water systems service areas. The total secondary water use for the area is 1,502 acre-feet, almost half of the total potable water use.

TABLE 22
WASATCH COUNTY
Secondary Water Use Within Public Community Water Systems
(Acre-Feet/Year)

WASATCH COUNTY WATER SUPPLIER	Residential Use (Ac-Ft/Yr)	Commercial Use (Ac-Ft/Yr)	Institutional Use (Ac-Ft/Yr)	Industrial/ Stockwater Use (Ac-Ft/Yr)	Total Secondary Use (Ac-Ft/Yr)
Canyon Meadows	0.0	0.0	0.0	0.0	**0.0**
Center Creek Water System	27.0	0.0	0.0	0.0	**27.0**
Charleston WCD	80.0	0.0	0.0	0.0	**80.0**
Country Estates Mobile Homes	3.0	0.0	0.0	0.0	**3.0**
Daniel Domestic Water Company	67.1	0.0	0.0	0.0	**67.1**
Heber City Water System	250.0	0.0	50.0	0.0	**300.0**
Interlaken Mutual Water Company	0.0	0.0	0.0	0.0	**0.0**
Jordanelle Special Service District	0.0	0.0	0.0	0.0	**0.0**
Midway City Water System	550.0	250.0	0.0	0.0	**800.0**
Storm Haven	30.0	0.0	0.0	0.0	**30.0**
Swiss Alpine Water Co.	0.0	0.0	0.0	0.0	**0.0**
Timber Lakes Water SSD	0.0	0.0	0.0	0.0	**0.0**
Twin Creeks SSD	100.0	0.0	0.0	0.0	**100.0**
Wallsburg Town Water System	50.0	0.0	20.0	0.0	**70.0**
Woodland South Hills Irrigation	25.0	0.0	0.0	0.0	**25.0**
WASATCH COUNTY TOTALS	**1,182.1**	**250.0**	**70.0**	**0.0**	**1,502.1**

Table 23 gives various gpcd use rates for the public community water systems of the county. **Appendix D** shows further detail of the data for each public community water system that is presented in the tables.

TABLE 23
WASATCH COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.160	143
Residential Potable Plus Secondary Use	0.232	207
Total Potable Use	0.197	175
Total Potable Plus Secondary Use	0.288	257

Note: Total Potable categories include residential, commercial, institiutional and industrial uses.

Table 24 on the following page gives the water use for public non-community, self-supplied industries, and private domestic water systems.

There are several campgrounds, both private and public, summer home developments, private businesses, as well as state parks including Deer Creek Lake, Jordanelle, and Wasatch Mountain State Parks. There are no two self-supplied industries in this area of Wasatch County. There are, however, a large number of private wells for mostly individual summer homes.

TABLE 24
WASATCH COUNTY
Water Use for Public Community Systems, Self-Supplied Industries and Private Domestic Systems (Acre-Feet/Year)

WASATCH COUNTY WATER SUPPLIER	POTABLE USAGE (Ac-Ft/Yr)					Total Secondary Water Use (Ac-Ft/Yr)
	Residential Use	Commercial Use	Institutional Use	Industrial Use	Total Potable Use	
Camp Cloud Rim (Utah Girl Scouts)	0.0	0.0	3.0	0.0	**3.0**	**0.0**
Camp Roger YMCA	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Daniel Summit Estates	4.0	0.0	0.0	0.0	**4.0**	**0.0**
Deer Creek Park	0.0	3.0	0.0	0.0	**3.0**	**5.0**
Diamond Hills Association	2.0	0.0	0.0	0.0	**2.0**	**0.0**
Forest Service Systems:						
Cascade Springs	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Heber Ranger Station	0.0	0.0	2.5	0.0	**2.5**	**0.0**
Mill Hollow Campground	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Heber City Kingdom Hall	0.0	0.0	0.6	0.0	**0.6**	**0.0**
Heber Valley RV Park	0.0	4.0	0.0	0.0	**4.0**	**0.0**
Holladay-Mt. Olympus Camp	0.0	1.0	0.0	0.0	**1.0**	**0.0**
Homestead Resort - Golf Course	0.0	0.0	0.0	0.0	**0.0**	**250.0**
LDS Church Facilities:						
Heber East Stake Center	0.0	0.0	0.5	0.0	**0.5**	**0.0**
Lake Creek Rec. Properties	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Oakcrest LDS Girls Camp	0.0	0.0	8.0	0.0	**8.0**	**0.0**
Mill Hollow Education Center	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Oak Haven	5.0	0.0	0.0	0.0	**5.0**	**0.0**
The Other End	0.0	0.8	0.0	0.0	**0.8**	**0.0**
Snake Creek Mutual Water	2.0	0.0	0.0	0.0	**2.0**	**0.0**
Soapstone Summer Homes	10.0	0.0	0.0	0.0	**10.0**	**0.0**
State Of Utah:						
Deer Creek Lake State Park	0.0	0.0	2.5	0.0	**2.5**	**0.0**
Island Beach	0.0	0.0	2.5	0.0	**2.5**	**0.0**
Jordanelle State Park	0.0	0.0	5.0	0.0	**5.0**	**0.0**
Little Deer Creek Camp	0.0	0.0	2.5	0.0	**2.5**	**0.0**
Wasatch Mountain State Park	0.0	0.0	50.0	0.0	**50.0**	**700.0**
Wasatch County Facilities:						
Solid Waste Transfer Station	0.0	0.0	1.0	0.0	**1.0**	**0.0**
Non-Community Sub-Totals	**23.0**	**8.8**	**82.1**	**0.0**	**113.9**	**955.0**
Self Supplied Industries[1]	0.0	0.0	0.0	0.0	**0.0**	**0.0**
Private Domestic Use	500.0	0.0	0.0	0.0	**500.0**	**0.0**
WASATCH COUNTY TOTALS	**523.0**	**8.8**	**82.1**	**0.0**	**613.9**	**955.0**

[1]There are no self supplied industries

Total M&I potable water use for all water systems in the Wasatch County portion of the Utah Lake Basin is about 3,853 acre-feet, while non-potable use is 2,457 acre-feet for a total overall M&I water use of 6,310 acre-feet. With a current population of about 18,000 people, this portion of the county has an overall water use rate of 313 gallons per capita per day.

APPENDIX A

JUAB COUNTY

PUBLIC COMMUNITY WATER SYSTEMS

DETAILED DESCRIPTIONS

MONA CULINARY WATER

Population = 925
Total No. of Connections = 298
Residential Connections = 290
Commercial Connections = 5
Institutional Connections = 3
Industrial Connections = none
Average No. of People Per Residential Connection = 3.19
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 60 %
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 344 ac-ft/yr (by agreement with Mona Irrigation)
   - Wells = 1,450 ac-ft/yr
   - Surface = none
2. **Water Rights:** 664 ac-ft/yr
3. **Maximum Potable Water Supply:** 664 ac-ft/yr
4. **Reliable Potable Water Supply:** 534 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimate: 71 gpcd (925 persons) (365 days) ÷ 325,851 gals/ac-ft = 73.6 ac-ft
2. **Residential Outdoor:** estimate 290 connections at 50% culinary (0.20 acres/ connection)(4 ac-ft/acre) = 116 ac-ft
3. **Institutional:** estimate 15 ac-ft
4. **Commercial:** estimate 5 ac-ft
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimated: 120 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

NEPHI CITY

Population = 5,175
Total No. of Connections = 1,700
Residential Connections = 1,609
Commercial Connections = 3
Institutional Connections = 20
Industrial Connections = 68
Average No. of People Per Residential Connection = 3.21
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Lagoons

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 1,618 ac-ft/yr
   - Wells = 2,300 ac-ft/yr
   - Surface = none
2. **Water Rights:** 18,000 ac-ft/yr
3. **Maximum Potable Water Supply:** 3,918 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,120 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated: 70gpcd (5,175)(365 days) ÷ 325,851 gals/ac-ft = 405.8 ac-ft/yr
2. **Residential Outdoor:** estimate 60% irrigated(1,609 connections)(0.15 acres)(4 ac-ft/connection) = 580 ac-ft
3. **Institutional:** estimate 20 ac-ft indoor, 80 ac-ft outdoor=100ac-ft (includes Canyon Hills Park golf course)
4. **Commercial:** estimate 5 ac-ft
5. **Industrial:** Rubber plant at 340 ac-ft, stockwatering at 10 ac-ft for Total of 350 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** given 40% with secondary – (0.4)(1,700 total connnections)(0.15 acres irrigated per connection)(4 ac-ft per acre) = total of 386 ac-ft; estimate 300 ac-ft
2. **Institutional:** estimate 50 ac-ft
3. **Commercial:** none
4. **Industrial:** none

ROCKY RIDGE TOWN

Population = 300
Total No. of Connections = 78
Residential Connections = 75 (21 duplexes included)
Commercial Connections = none
Institutional Connections = 1
Industrial Connections = 2
Average No. of People Per Residential Connection = 4.00
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 419 ac-ft/yr
   - Surface = none
2. **Water Rights:** 121 ac-ft/yr
3. **Maximum Potable Water Supply:** 121 ac-ft/yr
4. **Reliable Potable Water Supply:** 121 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimate: 69gpcd (300 people)(365 days) / 325,851 gallons/ac-ft = 23.2 ac-ft
2. **Residential Outdoor:** Remainder of given total of 38.7 ac-ft = 15.5 ac-ft
3. **Institutional:** estimate 3.0 ac-ft
4. **Commercial:** given 0.6 ac-ft
5. **Industrial:** given 0.7 ac-ft stockwatering

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

APPENDIX B

SUMMIT COUNTY

PUBLIC COMMUNITY WATER SYSTEMS

DETAILED DESCRIPTIONS

FRANCIS CULINARY WATER

Population = 690
Total No. of Connections = 350
Residential Connections = 348
Commercial Connections = 27
Institutional Connections = 9
Industrial Connections = none
Average No. of People Per Residential Connection = 2.0
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 344 ac-ft/yr
   - Wells = 294 ac-ft/yr
   - Surface = none
2. **Water Rights:** 731.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 638 ac-ft/yr
4. **Reliable Potable Water Supply:** 349 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate 68gpcd(690 people)(365 days)/ 325,851 gals/ac-ft = 52.6 ac-ft
2. **Residential Outdoor:** estimate 100 ac/ft
3. **Institutional:** estimate 20 ac-ft
4. **Commercial:** estimate 0.5 ac-ft
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 50 ac-ft
2. **Institutional:** estimate 10 ac-ft
3. **Commercial:** none
4. **Industrial:** none

WOODLAND MUTUAL WATER COMPANY

Population = 200
Total No. of Connections = 90
Residential Connections = 77
Commercial Connections = 3
Institutional Connections = 10 (estimated)
Industrial Connections = none
Average No. of People Per Residential Connection = 2.6
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 40%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 44.2 ac-ft/yr
   - Wells = 18.2 ac-ft/yr
   - Surface = none
2. **Water Rights:** 61.8 ac-ft/yr
3. **Maximum Potable Water Supply:** 61.8 ac-ft/yr
4. **Reliable Potable Water Supply:** 52.6 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 74.5 gpcd (200 persons) (365 days) ÷ 325,851 gals/ac-ft = 16.7 ac-ft
2. **Residential Outdoor:** Given total of 56.8 – 16.7 = 40.1 ac-ft
3. **Institutional:** Estimate 5.0 ac-ft
4. **Commercial:** Given 6.1 ac-ft
5. **Industrial:** Given 5.0 ac-ft (stockwatering)

C. <u>Secondary Water Use:</u>

1. **Residential:** Estimate 5 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

APPENDIX C

UTAH COUNTY

PUBLIC COMMUNITY WATER SYSTEMS

DETAILED DESCRIPTIONS

ALPINE CITY

Population = 8,000
Total No. of Connections = 2,020
Residential Connections = 1,956
Commercial Connections = 18
Institutional Connections = 17
Industrial Connections = 29
Average No. of People Per Residential Connection = 4.1
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 40%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 3,500 ac-ft/yr
   - Wells = 3,260 ac-ft/yr
   - Surface = none
2. **Water Rights:** 5,017.3 ac-ft/yr
3. **Maximum Potable Water Supply:** 5,017.3 ac-ft/yr
4. **Reliable Potable Water Supply:** 3801.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 63.3 gpcd (8,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 567.2 ac-ft
2. **Residential Outdoor:** Remainder of given residential total use of: 834.5 – 567.2 = 267.3 ac-ft
3. **Institutional:** given 18.4 ac-ft
4. **Commercial:** given 25.3 ac-ft
5. **Industrial:** given 24.8 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 1,900 ac-ft
2. **Institutional:** estimate 200 ac-ft
3. **Commercial:** estimate 22 ac-ft
4. **Industrial:** none

ALPINE COVE WATER SSD

Population = 210
Total No. of Connections = 51
Residential Connections = 48
Commercial Connections = none
Institutional Connections = none
Industrial Connections = 3 (stockwatering)
Average No. of People Per Residential Connection = 4.3
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 523 ac-ft/yr
   - Surface = none
2. **Water Rights:** 91.2 ac-ft/yr
3. **Maximum Potable Water Supply:** 91.2 ac-ft/yr
4. **Reliable Potable Water Supply:** 91.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate at 63.3gpcd (210people) (365days) / 325,851 gals/ac-ft = 14.9 ac-ft
2. **Residential Outdoor:** remainder of given total 73.9 ac-ft = 59.0 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial:** estimate 1.0 ac-ft (stockwatering)

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

AMERICAN FORK MUNICIPAL WATER SYSTEM

Population = 23,500
Total No. of Connections = 6,229
Residential Connections = 5,800
Commercial Connections = 335
Institutional Connections = 52 (40 additional unmetered)
Industrial Connection = none given
Average No. of People Per Residential Connection = 4.0
Average Lot Size =0.33 acres
Percent of Lot Irrigated = 60%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 4,570 ac-ft/yr
   - Wells = 40,270 ac-ft/yr
   - Surface = none
2. **Water Rights:** 33,000 ac-ft/yr
3. **Maximum Potable Water Supply:** 33,000 ac-ft/yr
4. **Reliable Potable Water Supply:** 22,000 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 67.1 gpcd (23,500 persons) (365 days) ÷ 325,851 gals/ac-ft = 1,766.3 ac-ft
2. **Residential Outdoor:** remainder of total given residential:4548.4 ac-ft – 1,766.3 ac-ft indoor = 2,782.1 ac-ft
3. **Institutional:** given 3,689.1 ac-ft
4. **Commercial:** given 1,473.2 ac-ft
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 200 ac-ft
2. **Institutional:** none
3. **Commercial:** estimate 300 ac-ft (Tri City Golf Course)
4. **Industrial:** none

BRADFORD ACRES WATER ASSOCIATION

Population = 40
Total No. of Connections = 11
Residential Connections = 11
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 3.6
Average Lot Size = 6.5 acres
Percent of Lot Irrigated = 10%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 290 ac-ft/yr
   - Surface = none
2. **Water Rights:** 83.9 ac-ft/yr
3. **Maximum Potable Water Supply:** 83.9 ac-ft/yr
4. **Reliable Potable Water Supply:** 83.9 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (40 persons) (365 days) ÷ 325,851 gals/ac-ft = 3.0 ac-ft
2. **Residential Outdoor:** none (all secondary)
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 15 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

CEDAR FORT CULINARY WATER

Population = 360
Total No. of Connections = 122
Residential Connections = 122
Commercial Connections = 1
Institutional Connections = 8
Industrial Connections = none
Average No. of People Per Residential Connection = 3.0
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 15%
Domestic Wastewater Treatment = Septic System

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 379.1 ac-ft
   - Wells = none
   - Surface = none
2. **Water Rights:** 362 ac-ft
3. **Maximum Potable Water Supply:** 362 ac-ft
4. **Reliable Potable Water Supply:** 227.5 ac-ft
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 65.4 gpcd (360 persons) (365 days) ÷ 325,851 gals/ac-ft = 26.4 ac-ft
2. **Residential Outdoor:** Remainder from all use = 50.6 ac-ft
3. **Institutional:** estimate 20 ac-ft
4. **Commercial:** estimate 2 ac-ft
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate: 20.0 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial:** none

CEDAR HILLS

Population = 7,000
Total No. of Connections = 1,635
Residential Connections = 1,630
Commercial Connections = 2
Institutional Connections = 3
Industrial/Stockwatering Connections = none
Average No. of People Per Residential Connection = 4.4
Average Lot Size = 0.33 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 1,935.6 ac-ft/yr
   - Surface = none
2. **Water Rights:** 858 ac-ft/yr (by agreement with American Fork)
3. **Maximum Potable Water Supply:** 858 ac-ft/yr
4. **Reliable Potable Water Supply:** 858 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 63 gpcd (7,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 500 ac-ft
2. **Residential Outdoor:** estimate at 0.35 (35% use culinary)(1,630)(0.2 acres)(2.4 ac-ft/year) = 275 ac-ft
3. **Institutional:** estimate 5 ac-ft
4. **Commercial:** estimate 2 ac-ft
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 0.65(1,630)(0.2 acres)(2.4 ac-ft/yr) = 500 ac-ft
2. **Institutional:** estimate 15 acres of parks = 50 ac-ft
3. **Commercial:** golf course at 100 acres = 240 ac-ft
4. **Industrial/Stockwater:** none

COVERED BRIDGE CANYON

Population = 280
Total No. of Connections = 68
Residential Connections = 67
Commercial Connections = none
Institutional Connections = none
Industrial Connections = 1 (stockwatering)
Average No. of People Per Residential Connection = 4.1
Average Lot Size = 2.50 acres
Percent of Lot Irrigated = 10%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 251.6 ac-ft/yr
   - Surface = none
2. **Water Rights:** 98 ac-ft/yr
3. **Maximum Potable Water Supply:** 98 ac-ft/yr
4. **Reliable Potable Water Supply:** 98 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate at 68 gpcd (280 people)(365 days)/ 325,851 gals/ac-ft = approx. 20 ac-ft
2. **Residential Outdoor:** estimate at 40 ac-ft
3. **Institutional:** estimate 4 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

EAGLE MOUNTAIN TOWN

Population = 9,500
Total No. of Connections = 2,175
Residential Connections = 2,002
Commercial Connections = 3
Institutional Connections = 170
Industrial/Stockwatering Connections = none
Average No. of People Per Residential Connection = 4.7
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 25%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 4,300 ac-ft/yr
   - Surface = none
2. **Water Rights:** 1,145.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 1,145.4 ac-ft/yr
4. **Reliable Potable Water Supply:** 1,145.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** 64.6 gpcd (9,500 persons) (365 days) ÷ 325,851 gals/ac-ft = 687.4 ac-ft
2. **Residential Outdoor:** Remainder: 1,371.2 – 687.4 = 683.8 ac-ft
3. **Institutional:** given: 922.6 ac-ft
4. **Commercial:** estimate 15 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

ELBERTA WATER COMPANY

Population = 280
Total No. of Connections = 64
Residential Connections = 61
Commercial Connections = none
Institutional Connections = 3
Industrial Connections = none
Average No. of People Per Residential Connection = 4.6
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 298.4 ac-ft/yr
   - Surface = none
2. **Water Rights:** 50.8 ac-ft/yr
3. **Maximum Potable Water Supply:** 50.8 ac-ft/yr
4. **Reliable Potable Water Supply:** 50.8 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** 68 gpcd (280 persons) (365 days) ÷325,851 gals/ac-ft = 21.3 ac-ft
2. **Residential Outdoor:** estimate 32 connections at 0.6 ac-ft/connection = 19.2 ac-ft
3. **Institutional:** estimate 4.0 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 20 ac-ft for 32 connections
2. **Institutional:** 2.5 acre park at 2.4 ac-ft/acre = 6 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

ELK RIDGE CORPORATION

Population = 1,920
Total No. of Connections = 491
Residential Connections = 491
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 3.9
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 25%
Domestic Wastewater Treatment = 50% Septic Tanks, 50% Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 1,840 ac-ft/yr
   - Surface = none
2. **Water Rights:** 1,071.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 1,071.4 ac-ft/yr
4. **Reliable Potable Water Supply:** 920 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 62.6 gpcd (1,920 people)(365 days)/325,851 gals/ac-ft = 134.6 ac-ft/yr
2. **Residential Outdoor:** remainder of given total use of 439.5 ac-ft/yr = 304.9 ac-ft/yr
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

FAIRFIELD IRRIGATION COMPANY

Population = 100 (40 on system, rest private domestic)
Total No. of Connections = 11
Residential Connections = 10
Commercial Connections = none
Institutional Connections = 1 (Camp Floyd)
Industrial Connections = none
Average No. of People Per Residential Connection = 4.0
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 25%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 96.7 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 2,628.2 ac-ft/yr
3. **Maximum Potable Water Supply:** 96.7 ac-ft/yr
4. **Reliable Potable Water Supply:** 96.7 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate: 68 gpcd (40 persons) (365 days) ÷ 325,851 = 3.0 ac-ft
2. **Residential Outdoor:** estimate: 2 ac-ft
3. **Institutional:** estimate: 1.0 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** estimate: 2.0 ac-ft (stockwatering)

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 0.3 ac-ft each for 10 connections = 3.0 ac-ft
2. **Institutional:** estimate 20 ac-ft (irrigation of grounds)
3. **Commercial:** none
4. **Industrial/Stockwater:** 2 ac-ft stockwatering

GENOLA

Population = 1,100
Total No. of Connections = 350
Residential Connections = 325
Commercial Connections = 7
Institutional Connections = 3
Industrial Connections = 15 (stockwatering)
Average No. of People Per Residential Connection = 3.4
Average Lot Size = 2.50 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic System

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 871 ac-ft/yr
   - Surface = none
2. **Water Rights:** 2,914.8 ac-ft/yr
3. **Maximum Potable Water Supply:** 871 ac-ft/yr
4. **Reliable Potable Water Supply:** 435.5 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** 161.3 (Santaquin)

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate at 71 gpcd(1,100 people)(365 days)/325,851 gals/ac-ft = 87.5 ac-ft
2. **Residential Outdoor:** estimate 40 ac-ft
3. **Institutional:** estimate 2.0 ac-ft
4. **Commercial:** estimate 0.5 ac-ft
5. **Industrial/Stockwater:** 7 dairies estimated at 130 ac-ft total

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate at 0.75 ac-ft/connection = 250 ac-ft
2. **Institutional:** one park at 70 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

GOOSENEST WATER COMPANY

Population =110
Total No. of Connections = 23
Residential Connections = 23
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 4.8
Average Lot Size = 5.0 acres
Percent of Lot Irrigated = 15%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 43.6 ac-ft/yr
   - Wells = 225.8 ac-ft/yr
   - Surface = none
2. **Water Rights:** 181.2 ac-ft/yr
3. **Maximum Potable Water Supply:** 128.5 ac-ft/yr
4. **Reliable Potable Water Supply:** 128.5 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (110 persons) (365 days) ÷ 325,851 gals/ac-ft = 8.4 ac-ft
2. **Residential Outdoor:** Remainder: 37.6 – 8.4 = 29.2 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

GOSHEN CULINARY WATER

Population = 880
Total No. of Connections = 340
Residential Connections = 318
Commercial Connections = 2
Institutional Connections = 6
Industrial Connections = 10
Average No. of People Per Residential Connection = 2.8
Average Lot Size = 0.6 acres
Percent of Lot Irrigated = 40%
Domestic Wastewater Treatment = Septic

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 645.2 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 1,086 ac-ft/yr
3. **Maximum Potable Water Supply:** 645.2 ac-ft/yr
4. **Reliable Potable Water Supply:** 387.1 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residenital Indoor:**Estimate:70.4gpcd(880people)(365days)/325,851 gals/ac-ft = 69.4 ac-ft
2. **Residential Outdoor:** remainder of given residential total of 148.1 ac-ft = 78.7 ac-ft
3. **Institutional:** given 29.1 ac-ft
4. **Commercial:** given 1.0 ac-ft
5. **Industrial/Stockwater:** given 25.5 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate: 250 lots at 0.4 ac-ft per lot = 100 ac-ft
2. **Institutional:** estimate 18 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

HIDDEN CREEK WATER COMPANY

Population = 30
Total No. of Connections = 9
Residential Connections = 9
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 3.3
Average Lot Size = 0.6 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 1,613.1 ac-ft/yr
   - Surface = none
2. **Water Rights:** 724 ac-ft/yr
3. **Maximum Potable Water Supply:** 724 ac-ft/yr
4. **Reliable Potable Water Supply:** 724 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate (68 gpcd)(30 people)(365 days)/ 325,851 gals/ac-ft = 2.5 ac-ft
2. **Residential Outdoor:** estimate 50% irrigated at 2.4 ac-ft/acre = 6.5 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

HIGHLAND WATER COMPANY

Population = 10,000
Total No. of Connections = 2,681
Residential Connections = 2,626
Commercial Connections = 18
Institutional Connections = 33
Industrial Connections = 1
Average No. of People Per Residential Connection = 3.8
Average Lot Size = 0.4 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 5,645.5 ac-ft/yr
   - Surface = none
2. **Water Rights:** 10,280 ac-ft/yr
3. **Maximum Potable Water Supply:** 5,645.5 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,823 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 62.2 gpcd (10,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 696.7 ac-ft
2. **Residential Outdoor:** Remainder: 806.1 – 696.7 = 109.4 ac-ft
3. **Institutional:** given 250 ac-ft
4. **Commercial:** given 53.5 ac-ft
5. **Industrial/Stockwater:** given 21.8 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 2,500 ac-ft
2. **Institutional:** estimate 200 ac-ft
3. **Commercial:** estimate 300 ac-ft (includes Alpine Country Club)
4. **Industrial/Stockwater:** none

LEHI CITY PUBLIC WORKS

Population = 28,350
Total No. of Connections = 6,958
Residential Connections = 6,732
Commercial Connections = 149
Institutional Connections = 47
Industrial Connections = 5
Average No. of People Per Residential Connection = 4.2
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 524.2 ac-ft/yr
   - Wells = 3,903.5 ac-ft/yr
   - Surface = none
2. **Water Rights:** 12,417.3 ac-ft/yr
3. **Maximum Potable Water Supply:** 4,427.7 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,476.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** given 2,118.2 ac-ft
2. **Residential Outdoor:** 100% secondary for all outdoor watering
3. **Institutional:** given 250.0 ac-ft
4. **Commercial:** given 253.4 ac-ft
5. **Industrial/Stockwater:** estimate 25.0 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate at 4,300 ac-ft
2. **Institutional:** estimate 200 ac-ft
3. **Commercial:** estimate 500 ac-ft (includes Thanksgiving Point)
4. **Industrial/Stockwater:** none

LINDON CITY CULINARY WATER

Population = 9,500
Total No. of Connections = 3,226
Residential Connections = 2,924
Commercial Connections = 162
Institutional Connections = 120
Industrial Connections = 20
Average No. of People Per Residential Connection = 3.2
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 30%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 204.9 ac-ft/yr
   - Wells = 5,532.6 ac-ft/yr
   - Surface = none
2. **Water Rights:** 10,457.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 5,737.5 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,889.3 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 63.3 gpcd (9,500 persons) (365 days) ÷ 325,851 gals/ac-ft = 674.1 ac-ft
2. **Residential Outdoor:** with 90% secondary, estimate 200.0 ac-ft
3. **Institutional:** estimate 150.0 ac-ft
4. **Commercial:** estimate 200.0 ac-ft
5. **Industrial/Stockwater:** estimate 200.0 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 900 ac-ft
2. **Institutional:** estimate 400 ac-ft
3. **Commercial:** estimate 50 ac-ft
4. **Industrial/Stockwater:** none

MANILA CULINARY WATER COMPANY

Population = 2,900
Total No. of Connections = 658
Residential Connections = 650
Commercial Connections = 5
Institutional Connections = 3
Industrial Connections = none
Average No. of People Per Residential Connection = 4.4
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 30%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 282.4 ac-ft/yr
   - Wells = 1,556.2 ac-ft/yr
   - Surface = none ac-ft/yr
2. **Water Rights:** 1,838.6 ac-ft/yr
3. **Maximum Potable Water Supply:** 1,838.6 ac-ft/yr
4. **Reliable Potable Water Supply:** 898.1 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 66 gpcd (2,900 persons) (365 days) ÷ 325,851 gals/ac-ft = 214.4 ac-ft
2. **Residential Outdoor:** Remainder of total given: 1,072.5 – 214.4 = 858.1 ac-ft
3. **Institutional:** given 22.6 ac-ft
4. **Commercial:** given 33.9 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

MAPLETON CITY

Population = 6,490
Total No. of Connections = 1,757
Residential Connections = 1,750
Commercial Connections = 2
Institutional Connections = 4
Industrial Connection = 1
Average No. of People Per Residential Connection = 3.7
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 30%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 1,903.3 ac-ft/yr
   - Wells = 4,718.0 ac-ft/yr
   - Surface = none
2. **Water Rights:** 9,455.0 ac-ft/yr
3. **Maximum Potable Water Supply:** 6,621.3 ac-ft/yr
4. **Reliable Potable Water Supply:** 3,501.0 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated at 65.3 gpcd (6,490 people)(365 days)/325,851 gals/ac-ft = 475.0 ac-ft
2. **Residential Outdoor:** Remainder of given total 1,520.0 – 475.0 = 1,045.0 ac-ft
3. **Institutional:** given 16.1 ac-ft
4. **Commercial:** given 10.6 ac-ft
5. **Industrial/Stockwater:** given 8.4 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** given 30% with secondary – 520 connections, estimate 400 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

NORTH FORK SPECIAL SERVICE DISTRICT

Population = 200
Total No. of Connections = 314
Residential Connections = 300
Commercial Connections = 4
Institutional Connections = 10
Industrial/Stockwatering Connections = none
Average No. of People Per Residential Connection = 1.5 (resort community)
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 967.8 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 620.8 ac-ft/yr
3. **Maximum Potable Water Supply:** 620.8 ac-ft/yr
4. **Reliable Potable Water Supply:** 581.7 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated at 50.0 ac-ft
2. **Residential Outdoor:** estimated at 100.0 ac-ft (told 30 large users, remainder under 5,000 gallons per month)
3. **Institutional:** estimated: 50.0 ac-ft
4. **Commercial:** given 105.0 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

OREM CITY

Population = 88,900
Total No. of Connections = 20,330
Residential Connections = 18,388
Commercial Connections = 1,900
Institutional Connections = 90
Industrial Connections = 2
Average No. of People Per Residential Connection = 4.8
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 2,984 ac-ft/yr
   - Wells = 18,306 ac-ft/yr
   - Surface = none
2. **Water Rights:** 21,804 ac-ft/yr
3. **Maximum Potable Water Supply:** 21,290 ac-ft/yr
4. **Reliable Potable Water Supply:** 14,330 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** 14,000 ac-ft (Metropolitan Water District of Orem)

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (88,900 persons) (365 days) ÷ 325,851 gals/ac-ft = 6,771.3 ac-ft
2. **Residential Outdoor:** remainder of given total of 15,613.1 ac-ft – 6,771.3 ac-ft = 8,841.8 ac-ft
3. **Institutional:** estimate 2,000 ac-ft
4. **Commercial:** estimate 3,000 ac-t
5. **Industrial/Stockwater:** estimate 550 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** 292 ac-ft given as total, estimate 172 ac-ft residential
2. **Institutional:** none
3. **Commercial:** estimate 120 ac-ft (includes Cascade Fairways g.c.)
4. **Industrial/Stockwater:** none

PAYSON MUNICIPAL WATER SYSTEM

Population = 15,000
Total No. of Connections = 6,046
Residential Connections = 5,818
Commercial Connections = estimate 170
Institutional Connections = estimate 50
Industrial Connections = 8
Average No. of People Per Residential Connection = 2.6
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 1,500 ac-ft/yr
   - Wells = 5,800 ac-ft/yr
   - Surface = none
2. **Water Rights:** 13,441 ac-ft/yr
3. **Maximum Potable Water Supply:** 7,300 ac-ft/yr
4. **Reliable Potable Water Supply:** 3,800 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** 68 gpcd (15,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 1,142.5 ac-ft
2. **Residential Outdoor:** remainder of total given 1,168.9 ac-ft – 1,142.5 = 26.4 ac-ft (low due to extensive secondary to all customers)
3. **Institutional:** estimate 260.0 ac-ft
4. **Commercial:** estimate 170.0 ac-ft
5. **Industrial/Stockwater:** estimate 40 ac-ft (mostly stockwatering)

C. <u>Secondary Water Use:</u>

1. **Residential:** given 5,700 connections, estimate at 2.2 ac-ft/acre and 0.2 acres per lot irrigated = approx. 2,500 ac-ft
2. **Institutional:** estimate 200 ac-ft
3. **Commercial:** estimate 250 ac-ft (includes Gladstan golf course)
4. **Industrial/Stockwater:** none

PLEASANT GROVE CITY

Population = 25,000
Total No. of Connections = 6,021
Residential Connections = 5,600
Commercial Connections = 340
Institutional Connections = 26
Industrial Connections = 5
Average No. of People Per Residential Connection = 4.5
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 1,500 ac-ft/yr
   - Wells = 14,194.4 ac-ft/yr
   - Surface = none
2. **Water Rights:** 14,500 ac-ft/yr
3. **Maximum Potable Water Supply:** 14,500 ac-ft/yr
4. **Reliable Potable Water Supply:** 8,000 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** 66 gpcd (25,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 1,850 ac-ft
2. **Residential Outdoor:** remainder of given 4,580 ac-ft – 1,850 ac-ft = 2,730 ac-ft
3. **Institutional:** given 343.3 ac-ft
4. **Commercial:** given 515 ac-ft
5. **Industrial/Stockwater:** estimate 171.7 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 250 ac-ft
2. **Institutional:** estimate 100 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** estimate 50 ac-ft

PROVO CITY

Population = 111,630
Total No. of Connections = 17,319
Residential Connections = 15,584
Commercial Connections = 1,671
Institutional Connections = 45
Industrial Connections = 19
Average No. of People Per Residential Connection = 7.2 (large student population in multi-family housing and large families make for the high number)
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 12,000 ac-ft/yr
   - Wells = 37,500 ac-ft/yr
   - Surface = 3,000 ac-ft/yr
2. **Water Rights:** 55,000 ac-ft/yr
3. **Maximum Potable Water Supply:** 52,500 ac-ft/yr
4. **Reliable Potable Water Supply:** 28,750 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** 8,000 ac-ft (Metropolitan Water District of Provo)

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate indoor at 69 gpcd (111,630 people)(365 days)/325,851 gals/ac-ft = 8,627.8 ac-ft
2. **Residential Outdoor:** remainder of given total residential of 13,538.5 ac-ft plus 5,000 ac-ft of "unaccounted" = 9,910.7 ac-ft
3. **Institutional:** given 3,369.0 ac-ft
4. **Commercial:** given 7,101.0 ac-ft
5. **Industrial/Stockwater:** given 725.0 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 1,100 ac-ft
2. **Institutional:** estimate 675 ac-ft (includes BYU and East Bay g.c.)
3. **Commercial:** estimate 600 ac-ft (includes Riverside Country Club g.c. and Seven Peaks Resort)
4. **Industrial/Stockwater:** estimate 60 ac-ft (outdoor watering)

SALEM MUNICIPAL WATER

Population = 4,900
Total No. of Connections = 1,400
Residential Connections = 1,333
Commercial Connections = 45
Institutional Connections = 20
Industrial Connections = 2
Average No. of People Per Residential Connection = 3.7
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Sewage Lagoons

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 905 ac-ft/yr
   - Wells = 2,236 ac-ft/yr
   - Surface = none
2. **Water Rights:** 4,675 ac-ft/yr
3. **Maximum Potable Water Supply:** 3,141 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,635 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated: 68 gpcd (4,900 persons) (365 days)/325,851 gals/ac-ft = approx. 375 ac-ft
2. **Residential Outdoor:** estimated at 830 ac-ft
3. **Institutional:** estimate 115 ac-ft
4. **Commercial:** estimate 30 ac-ft
5. **Industrial/Stockwater:** estimate 15 ac-ft (dairy)

C. <u>Secondary Water Use:</u>

1. **Residential:** estimated at 100 ac-ft (given 25% with secondary)
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

SANTAQUIN MUNICIPAL WATER SYSTEM

Population = 5,800
Total No. of Connections = 1,641
Residential Connections = 1,607
Commercial Connections = 25
Institutional Connections = 5
Industrial Connections = 4
Average No. of People Per Residential Connection = 3.6
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Sewage Lagoons

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 1,500 ac-ft/yr
   - Wells = 1,600 ac-ft/yr
   - Surface = none
2. **Water Rights:** 5,068 ac-ft/yr
3. **Maximum Potable Water Supply:** 3,100 ac-ft/yr
4. **Reliable Potable Water Supply:** 1,700 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 67 gpcd (5,800 persons) (365 days) ÷ 325,851 gals/ac-ft = 435.3 ac-ft
2. **Residential Outdoor:** Remainder of given residential total of : 841.8 ac-ft – 435.3 ac-ft = 406.5 ac-ft
3. **Institutional:** given 4 mg, round to 15 ac-ft
4. **Commercial:** given 14 mg, round to 45 ac-ft
5. **Industrial/Stockwater:** given 3 mg, round to 10 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 200 ac-ft (from spring bypass)
2. **Institutional:** estimate 100 ac-ft (also from spring bypass)
3. **Commercial:** none
4. **Industrial/Stockwater:** none

SARATOGA SPRING MUTUAL

Population = 6,000
Total No. of Connections = 1,500
Residential Connections = 1,494
Commercial Connections = 2
Institutional Connections = 4
Industrial Connections = none
Average No. of People Per Residential Connection = 4.0
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 1,935 ac-ft/yr
   - Surface = none
2. **Water Rights:** 905 ac-ft/yr
3. **Maximum Potable Water Supply:** 905 ac-ft/yr
4. **Reliable Potable Water Supply:** 905 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 67 gpcd (6,000 persons) (365 days) ÷ 325,851 = 450 ac-ft
2. **Residential Outdoor:** Remainder: 640 ac-ft total minus 50 ac-ft inst. and comm.=590 ac-ft – 450 ac-ft = 140 ac-ft
3. **Institutional:** estimate 45 ac-ft
4. **Commercial:** estimate 5 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 1400 lots (0.2 ac-ft/lot) = approx. 300 ac-ft/yr
2. **Institutional:** none
3. **Commercial:** 300 ac-ft (Townscove golf course)
4. **Industrial/Stockwater:** none

SPANISH FORK MUNICIPAL WATER

Population = 23,000
Total No. of Connections = 6,930
Residential Connections = 6,450
Commercial Connections = 400
Institutional Connections = 60
Industrial Connections = 20
Average No. of People Per Residential Connection = 3.3
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 12,762.4 ac-ft/yr
   - Wells = 1,935.6 ac-ft/yr
   - Surface = none
2. **Water Rights:** 20,640 ac-ft/yr
3. **Maximum Potable Water Supply:** 14,698 ac-ft/yr
4. **Reliable Potable Water Supply:** 8,750.5 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (23,000 persons)(365 days) ÷ 325,851 gals/ac-ft = 1,751.9 ac-ft
2. **Residential Outdoor:** Remainder: 2,015 ac-ft plus 100 ac-ft estimated unmetered = 363 ac-ft
3. **Institutional:** given 246.4 ac-ft of use, plus 150 ac-ft estimated unmetered, plus 450 ac-ft of given "losses" =846.4 ac-ft
4. **Commercial:** given 266.2 ac-ft of use, plus 50 ac-ft estimated construction water and 100 ac-ft of unmetered = 416.2 ac-ft
5. **Industrial/Stockwater:** given 162.9 ac-ft plus 50 ac-ft estimated unmetered = 212.9 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 3,200 ac-ft
2. **Institutional:** estimate 500 ac-ft (includes Spanish Oaks g.c.)
3. **Commercial:** estimate 100 ac-ft
4. **Industrial/Stockwater:** estimate 100 ac-ft

SPRING LAKE WATERWORKS COMPANY

Population = 430
Total No. of Connections = 120
Residential Connections = 115
Commercial Connections = 4
Institutional Connections = 1
Industrial Connection = 10
Average No. of People Per Residential Connection = 3.7
Average Lot Size = 2.50 acres
Percent of Lot Irrigated = 10%
Domestic Wastewater Treatment = Septic System

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 144.8 ac-ft/yr
   - Wells = 658.1 ac-ft/yr
   - Surface = none
2. **Water Rights:** 673.3 ac-ft/yr
3. **Maximum Potable Water Supply:** 673.3 ac-ft/yr
4. **Reliable Potable Water Supply:** 415.9 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated: 68 gpcd (430 persons) (365 days) ÷ 325,851 gals/ac-ft = 33.0 ac-ft
2. **Residential Outdoor:** estimate at 2x indoor = 66.0 ac-ft
3. **Institutional:** estimate 5.0 ac-ft
4. **Commercial:** estimate 2.0 ac-ft
5. **Industrial/Stockwater:** estimate 10.0 ac-ft (stockwatering)

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 30 ac-ft
2. **Institutional:** estimate 8 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

SPRINGDALE PLAT A & B

Population = 100
Total No. of Connections = 26
Residential Connections = 26
Commercial Connections = none
Institutional Connections = 1
Industrial Connections = none
Average No. of People Per Residential Connection = 3.8
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 263 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** NA
3. **Maximum Potable Water Supply:** 206.5 ac-ft/yr (share agreement with Provo City)
4. **Reliable Potable Water Supply:** 123.9 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (100 persons) (365 days) ÷ 325,851 gals/ac-ft = 7.6 ac-ft
2. **Residential Outdoor:** estimate at 0.5 ac-ft per connection = 13.0 ac-ft
3. **Institutional:** estimate 1.5 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

SPRINGVILLE WATER DEPARTMENT

Population = 24,000
Total No. of Connections = 6,767
Residential Connections = 6,345
Commercial Connections = 322
Institutional Connections = 54
Industrial Connections = 8
Average No. of People Per Residential Connection = 3.8
Average Lot Size = 0.25 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 6,290.7 ac-ft/yr
   - Wells = 12,781.5 ac-ft/yr
   - Surface = none
2. **Water Rights:** 19,286.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 14,717.1 ac-ft/yr
4. **Reliable Potable Water Supply:** 10,164.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 69 gpcd (24,000 persons) (365 days) ÷ 325,851 gals/ac-ft = 1,855.0 ac-ft
2. **Residential Outdoor:** remainder of given residential total of 3,841.6 – 1,855.0 ac-ft = 1,986.6 ac-ft
3. **Institutional:** given 190.3 ac-ft
4. **Commercial:** given 890.3 ac-ft
5. **Industrial/Stockwater:** 1,945.0 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 700 customers at 0.5 ac-ft each = 350 ac-ft
2. **Institutional:** 253 ac-ft (Hobble Creek g.c.)
3. **Commercial:** none
4. **Industrial/Stockwater:** estimate 50 ac-ft

UTAH STATE HOSPITAL

Population = 500 (average of staff plus patients)
Total No. of Connections = NA
Residential Connections = NA
Commercial Connections = NA
Institutional Connections = NA
Industrial Connections = NA
Average No. of People Per Residential Connection = NA
Average Lot Size = NA
Percent of Lot Irrigated = NA
Domestic Wastewater Treatment = Treatment Plant

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 250.0 ac-ft/yr
   - Wells = 725.9 ac-ft/yr
   - Surface = none
2. **Water Rights:** 2,983.7 ac-ft/yr
3. **Maximum Potable Water Supply:** 975.9 ac-ft/yr
4. **Reliable Potable Water Supply:** 512.9 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** none
2. **Residential Outdoor:** none
3. **Institutional:** estimate total 175.0 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** estimate 75 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

WHITE HILLS SUBDIVISION

Population = 400
Total No. of Connections = 110
Residential Connections = 110
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 3.6
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 30%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 2,783 ac-ft/yr
   - Surface = none
2. **Water Rights:** 5,792 ac-ft/yr
3. **Maximum Potable Water Supply:** 2,783.0 ac-ft/yr
4. **Reliable Potable Water Supply:** 1,391.5 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 67 gpcd (400 persons) (365 days)/(325,851 gals/ac-ft) = 30 ac-ft
2. **Residential Outdoor:** Remainder from given total: 105 ac-ft – 30 ac-ft = 75 ac-ft
3. **Institutional:** none
4. **Commercial:** 1 ac-ft (outside common landscaping)
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

WOODLAND HILLS

Population = 1,200
Total No. of Connections = 266
Residential Connections = 266
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 4.5
Average Lot Size = 2.0 acres
Percent of Lot Irrigated = 15%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 161 ac-ft/yr
   - Wells = 379 ac-ft/yr
   - Surface = none
2. **Water Rights:** 332.4 ac-ft/yr
3. **Maximum Potable Water Supply:** 332.4 ac-ft/yr
4. **Reliable Potable Water Supply:** 274.5 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 65 gpcd (1200 persons) (365 days) ÷ 325,851 gals/ac-ft = 87.4 ac-ft
2. **Residential Outdoor:** Remainder of given total 189.6 ac-ft – 10.0 estimated institutional- 87.4 ac-ft = 92.2 ac-ft
3. **Institutional:** estimate 10.0 ac-ft
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

APPENDIX D

WASATCH COUNTY

PUBLIC COMMUNITY WATER SYSTEMS

DETAILED DESCRIPTIONS

CANYON MEADOWS

Population = 40
Total No. of Connections = 13
Residential Connections = 13
Commercial Connections = none
Institutional Connections = none
Industrial Connection = none
Average No. of People Per Residential Connection = 3.7
Average Lot Size = 2.50 acres
Percent of Lot Irrigated = 5%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 190.6 ac-ft/yr
   - Wells = 72.0 ac-ft/yr
   - Surface = none
2. **Water Rights:** 313.7 ac-ft/yr
3. **Maximum Potable Water Supply:** 233.0 ac-ft/yr
4. **Reliable Potable Water Supply:** 186.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated: 80 gpcd (40 persons) (365 days) ÷ 325,851 gals/ac-ft = approx. 4.0 ac-ft
2. **Residential Outdoor:** = estimate at 0.5 ac-ft per connection = approx. 7.0 ac-ft
3. **Institutional:** estimate 5 ac-ft (clubhouse with landscaping and swimming pool)
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

CENTER CREEK CULINARY WATER COMPANY

Population = 175
Total No. of Connections = 70
Residential Connections = 70
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 2.5
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 80.7 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 90.5 ac-ft/yr
3. **Maximum Potable Water Supply:** 80.7 ac-ft/yr
4. **Reliable Potable Water Supply:** 48.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 78.4 gpcd (150 persons) (365 days) ÷ 325,851 gals/ac-ft = 13.2 ac-ft
2. **Residential Outdoor:** Remainder: 28.4 – 13.2 = 15.2 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 27 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

CHARLESTON WATER CONSERVANCY DISTRICT

Population = 520
Total No. of Connections = 224
Residential Connections = 218
Commercial Connections = 2
Institutional Connections = 2
Industrial Connections = 2 (dairy farms)
Average No. of People Per Residential Connection = 3.9
Average Lot Size =1.00 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 72.6 ac-ft/yr
   - Wells = 645.2 ac-ft/yr
   - Surface = none
2. **Water Rights:** 278.7 ac-ft/yr
3. **Maximum Potable Water Supply:** 170.3 ac-ft/yr
4. **Reliable Potable Water Supply:** 141.3 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 72.4 gpcd (520 persons) (365 days) ÷ 325,851 gals/ac-ft = 42.2 ac-ft
2. **Residential Outdoor:** Remainder of given total of 48,865,274 =150.0 ac-ft minus others at 18.0 ac-ft = 89.8 ac-ft
3. **Institutional:** estimate 2.5 ac-ft
4. **Commercial:** estimate 0.5 ac-ft
5. **Industrial/Stockwater:** estimate 15.0 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimated 168 connections at 0.5 ac-ft per connection = approx. 80 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

COUNTRY ESTATES MOBILE HOMES

Population = 200
Total No. of Connections = 100
Residential Connections = 100 (average yearly use)
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 2.0
Average Lot Size = 1.0 acre total irrigated area
Percent of Lot Irrigated = NA
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 64.6 ac-ft/yr
   - Surface = none
2. **Water Rights:** 68.2 ac-ft/yr
3. **Maximum Potable Water Supply:** 64.6 ac-ft/yr
4. **Reliable Potable Water Supply:** 32.3 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated: 50 gpcd (200 persons) (365 days) ÷ 325,851 gals/ac-ft = 11.2 ac-ft
2. **Residential Outdoor:** all secondary
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 3.0 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

DANIEL DOMESTIC WATER COMPANY

Population = 340
Total No. of Connections = 124
Residential Connections = 123
Commercial Connections = none
Institutional Connections = none
Industrial Connections = 1
Average No. of People Per Residential Connection = 3.1
Average Lot Size = 2.00 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 235.5 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 258.5 ac-ft/yr
3. **Maximum Potable Water Supply:** 235.5 ac-ft/yr
4. **Reliable Potable Water Supply:** 141.3 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 72 gpcd (340 persons) (365 days) ÷ 325,851 gals/ac-ft = 28.6 ac-ft
2. **Residential Outdoor:** Remainder of given 23,830,800 total = 73.1 ac-ft – 28.6 ac-ft = 44.5 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** given 0.1 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate total outdoor water required at 111.6 ac-ft minus culinary of 44.5 ac-ft = 67.1 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

HEBER CITY CORPORATION WATER

Population = 8,640
Total No. of Connections = 2,987
Residential Connections = 2,617
Commercial Connections = 253
Institutional Connections = 44
Industrial Connections = 73
Average No. of People Per Residential Connection = 3.6
Average Lot Size = 0.30 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant (lagoons)

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 2,887.3 ac-ft/yr
   - Wells = 2,693.8 ac-ft/yr
   - Surface = none
2. **Water Rights:** 5,146.6 ac-ft/yr
3. **Maximum Potable Water Supply:** 5,146.6 ac-ft/yr
4. **Reliable Potable Water Supply:** 2,862.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 71 gpcd (8,640 persons) (365 days) ÷ 325,851 gals/ac-ft = 687.1 ac-ft
2. **Residential Outdoor:** Remainder of given total of 488,438,520 gals or 1,499.0 ac-ft –687.1 ac-ft = 811.9 ac-ft
3. **Institutional:** given 43,658,969 gals = 134.0 ac-ft
4. **Commercial:** given 95,611,818 gals = 293.4 ac-ft
5. **Industrial/Stockwater:** given 11,273,017 gals = 34.6 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 300 ac-ft total: 250 ac-ft residential
2. **Institution:** remainder of total estimate = 50 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

INTERLAKEN MUTUAL WATER COMPANY

Population = 270
Total No. of Connections = 125
Residential Connections = 125
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 2.4
Average Lot Size = 0.60 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 364.5 ac-ft/yr
   - Surface = none
2. **Water Rights:** 437.8 ac-ft/yr
3. **Maximum Potable Water Supply:** 364.5 ac-ft/yr
4. **Reliable Potable Water Supply:** 182.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 80 gpcd (300 persons) (365 days) ÷ 325,851 gals/ac-ft = 24.2 ac-ft
2. **Residential Outdoor:** Remainder of given total of 51.1 ac-ft –24.2 ac-ft = 26.9 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

JORDANELLE SPECIAL SERVICE DISTRICT

Population = 1,200
Total No. of Connections = 41 (32 are 10 unit or more multi-housing)
Residential Connections = 39 (estimated 500 units)
Commercial Connections = 1
Institutional Connections = 1
Industrial Connections = none
Average No. of People Per Residential Connection = 2.5
Average Lot Size = NA
Percent of Lot Irrigated = about 30 total irrigated acres
Domestic Wastewater Treatment = septic system

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 300 ac-ft/yr
   - Surface = 4,000 ac-ft/yr
2. **Water Rights:** 4,310 ac-ft/yr
3. **Maximum Potable Water Supply:** 4,300 ac-ft/yr
4. **Reliable Potable Water Supply:** 4,150 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 68 gpcd (1,200 persons) (365 days) ÷ 325,851 gals/ac-ft = 91.4 ac-ft
2. **Residential Outdoor:** Remainder of given total 158.0 ac-ft – 91.4 ac-t = 66.6 ac-ft
3. **Institutional:** estimate 5.0 ac-ft
4. **Commercial:** given = 5.8 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

MIDWAY CITY WATER SYSTEM

Population = 2,480
Total No. of Connections = 1,063
Residential Connections = 1,036
Commercial Connections = 13
Institutional Connections = 10
Industrial Connections = 4
Average No. of People Per Residential Connection = 2.3
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Treatment Plant (lagoons)

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 3,026.0 ac-ft/yr
   - Wells = 54.8 ac-ft/yr
   - Surface = none
2. **Water Rights:** 2,910 ac-ft/yr
3. **Maximum Potable Water Supply:** 2,897.8 ac-ft/yr
4. **Reliable Potable Water Supply:** 1,842.4 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimated at 70 gpcd (2,480 people)(365 days)/325,851 gals/ac-ft = 194.5 ac-ft
2. **Residential Outdoor:** estimate at 30% culinary with 1,046 connections (0.25 acres)(3 ac-ft/acre) = 235 ac-ft
3. **Institutional:** estimate 10 ac-ft
4. **Commercial:** 13 connections at an estimated 1.0 ac-ft/connection plus total use at Homestead resort = approximately 45.0 ac-ft
5. **Industrial/Stockwater:** estimate 4.0 ac-ft stockwatering

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 70% of 1046 connections at 0.25 acres per connection (3 ac-ft/acre) = approximately 550 ac-ft
2. **Institutional:** none
3. **Commercial:** estimate 240 ac-ft (includes Homestead g.c.)
4. **Industrial/Stockwater:** none

STORM HAVEN

Population = 110
Total No. of Connections = 52
Residential Connections = 52
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 2.1
Average Lot Size = 1.0 acres
Percent of Lot Irrigated = 40%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 88.7 ac-ft/yr
   - Surface = none
2. **Water Rights:** 60 ac-ft/yr
3. **Maximum Potable Water Supply:** 60 ac-ft/yr
4. **Reliable Potable Water Supply:** 30 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 85 gpcd (110 persons) (365 days) ÷ 325,851 gals/ac-ft = 10.5 ac-ft
2. **Residential Outdoor:** remainder of given total of 5,696,570 gal = 17.5 ac-ft minus indoor at 10.5 ac-ft = 7.0 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** given 50% access = 25 lots(0.40 acres irrigated)(3 ac-ft/acre) = 30 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

SWISS ALPINE WATER COMPANY

Population = 300
Total No. of Connections = 88
Residential Connections = 88
Commercial Connections = none
Institutional Connections = none
Industrial Connections = none
Average No. of People Per Residential Connection = 3.4
Average Lot Size = 0.50 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 88.7 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 31.2 ac-ft/yr
3. **Maximum Potable Water Supply:** 31.2 ac-ft/yr
4. **Reliable Potable Water Supply:** 31.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** Estimated: 65 gpcd (300 persons) (365 days) ÷ 325,851 gals/ac-ft = 21 ac-ft
2. **Residential Outdoor:** estimate at 0.35 ac-ft/lot total use (88 lots) = 31 ac-ft minus indoor use at 21 ac-ft = 10 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

TIMBERLAKES WATER SPECIAL SERVICE DISTRICT

Population = 1000 people (estimated)
Total No. of Connections = 680
Residential Connections = 680
Commercial Connections = none
Institutional Connections = none
Industrial Connection = none
Average No. of People Per Residential Connection = 1.5
Average Lot Size = 2.00
Percent of Lot Irrigated = no outside watering allowing (all natural landscape)
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 320.0 ac-ft/yr
   - Wells = none
   - Surface = none
2. **Water Rights:** 637.0 ac-ft/yr
3. **Maximum Potable Water Supply:** 320.0 ac-ft/yr
4. **Reliable Potable Water Supply:** 192.0 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate double of given July-December of 40 ac-ft = 80 ac-ft
2. **Residential Outdoor:** None (no outside watering allowed)
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** none
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

TWIN CREEKS SPECIAL SERVICE DISTRICT

Population = 710 people
Total No. of Connections = 165
Residential Connections = 165
Commercial Connections = none
Institutional Connections = none
Industrial Connection = none
Average No. of People Per Residential Connection = 4.3
Average Lot Size = 1.00 acres
Percent of Lot Irrigated = 30%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = none
   - Surface = 500 ac-ft/yr
2. **Water Rights:** 1,272.1 ac-ft/yr
3. **Maximum Potable Water Supply:** 500 ac-ft/yr
4. **Reliable Potable Water Supply:** 500 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate 68 gpcd(710 people)(365 days) / 325,851 gals/ac-ft = 54.1 ac-ft
2. **Residential Outdoor:** remainder of given 59.9 total – 54.1 indoor =5.8 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 0.6 ac-ft per connection(165 connections) = say 100 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

WALLSBURG TOWN WATER SYSTEM

Population = 460
Total No. of Connections =111
Residential Connections = 110
Commercial Connections = 1
Institutional Connections = none
Industrial Connection = none
Average No. of People Per Residential Connection = 4.2
Average Lot Size = 1.0 acres
Percent of Lot Irrigated = 20%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = 87.1
   - Wells = 66.9 ac-ft/yr
   - Surface = none
2. **Water Rights:** 179.3 ac-ft/yr
3. **Maximum Potable Water Supply:** 154.0 ac-ft/yr
4. **Reliable Potable Water Supply:** 119.2 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate at 64 gpcd (460 people)(365 days)/325,851 gal/ac-ft = 33.0 ac-ft
2. **Residential Outdoor:** estimate total with given 2001 data at 168,513 gal per connection times 110 connections = total use of 56.9 ac-ft minus indoor, commercial, and institutional = 20.0 ac-ft
3. **Institutional:** estimate at 3.5 ac-ft
4. **Commercial:** estimate at 0.1 ac-ft
5. **Industrial/Stockwater:** none

C. <u>Secondary Water Use:</u>

1. **Residential:** given 80% with secondary, estimate at 0.6 ac-ft per connection = about 50 ac-ft
2. **Institutional:** with park, town hall, other misc. estimate 20 ac-ft
3. **Commercial:** none
4. **Industrial/Stockwater:** none

WOODLAND SOUTH HILLS IRRIGATION COMPANY

Population = 60
Total No. of Connections = 24 (9 with own wells)
Residential Connections = 27
Commercial Connections = none
Institutional Connections = none
Industrial Connection = none
Average No. of People Per Residential Connection = 3.6
Average Lot Size = 0.5 acres
Percent of Lot Irrigated = 50%
Domestic Wastewater Treatment = Septic Tanks

A. <u>Water Supply:</u>

1. **Source Capacity:**
   - Springs = none
   - Wells = 20 ac-ft
   - Surface = none
2. **Water Rights:** 37ac-ft/yr
3. **Maximum Potable Water Supply:** 116 ac-ft/yr
4. **Reliable Potable Water Supply:** 58 ac-ft/yr
5. **Wholesale Potable Water Purchase Contract:** none

B. <u>Primary Water Use:</u>

1. **Residential Indoor:** estimate 60 gpcd(60 people)(365 days)/325,851 gals/ac-ft = 4.0 ac-ft
2. **Residential Outdoor:** remainder of given total of 9.3 ac-ft minus indoor at 4.0 ac-ft = 5.3 ac-ft
3. **Institutional:** none
4. **Commercial:** none
5. **Industrial/Stockwater:** given 0.2 ac-ft

C. <u>Secondary Water Use:</u>

1. **Residential:** estimate 25 ac-ft
2. **Institutional:** none
3. **Commercial:** none
4. **Industrial/Stockwater:** none

APPENDIX E

OREM MUNICIPAL WATER SYSTEM

WATER USE DATA FORM

AR: 1 4-26-04 CG

Information jointly requested by:
Utah Division of Water Resources, 538-7264
Division of Drinking Water, 538-4200, and
Division of Water Rights, 538-7392

UTAH WATER USE DATA FORM
DATA FOR 2003

Return completed form to:
Utah Division of Water Rights
P.O. Box 146300
Salt Lake City, Utah 84114-6300

System Name: Orem Municipal Water System
Address: 56 North State
Orem, Utah 84057

Population served: 88,897 DEQ #: 25020
Total No. Connections: 20,330 County: Utah
Average Lot Size Served: 1/4 Acre (s)
Estimated Percent of Lot Irrigated 50 %
Phone Number: 801-229-7552
Phone Number: 801-229-7555

RECEIVED
APR 23 2004
WATER RIGHTS
SALT LAKE

Contact Person: Bruce W. Chesnut, Director of Public Works
E-Mail Address: bwchesnut@orem.org
Form Filled Out By: Lane Gray & Elden Olsen
I. STORAGE INVENTORY: Total treated storage capacity: 12,440,000 In gallons. Number of tanks: 6
II. SOURCE INVENTORY:

1. Source Name: Utah Valley Water Treatment Plant Type: RS Location: Sec 1, T6S, R2E, B&M, WR Number:
Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____
Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
149,856	126,672	121,299	135,720	309,148	51,691	760,655	693,940	401,694	354,066	110,838	140,240	3,355,819

2. Source Name: Alta Springs Type: SP Location: Sec 33,T5S, R3E, SLB&M WR Number: 55-4160, 55-7063
Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____
Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
36,379	30,551	30,401	27,574	29,732	42,114	104139	125,267	100,719	81,222	61,432	52,049	721,579

3. Source Name: Canyon Springs Type: Spring Location: Sec 6, T6S, R3E, SLB&M WR Number: 55-3767
Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____
Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
15,671	13,423	12,643	15,088	14,361	13,881	15,284	13,862	13,993	14,760	12,833	14,148	169,947

4. Source Name: Well No. 1 (1500 S. 800 E.) Type: Well Location: Sec 25, T6S, R2E, SLB&M WR Number: 55-290, 55-321, 55-654, 55-690, 55-752, 55-954
Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____
Date of Last Pump Test: 5-94 Yield of Well: 3,300 gpm Rated Pump Capacity _____ [ ] gpm, [ ] cfs
Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
21,707				28,958	84,436	97,647	89,956	96,535	88,997	11,888		520,124

5. Source Name: Well No. 2 (715 N. 980 W.) Type: Well Location: Sec 9, T6S, R2E, SLB&M WR Number: 55-290, 55-321, 55-654, 55-690, 55-752, 55-954
Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____
Date of Last Pump Test: 5-94 Yield of Well: 3,000 gpm Rated Pump Capacity _____ [ ] gpm, [ ] cfs
Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
			32,722	33,473	61,185	63,625	41,087	61,755	14,300			308,147

6. Source Name: Well No. 3 (475 N. 400 E.) Type: Well Location: Sec 11, T6S, R2E, SLB&M WR Number: 55-290, 55-321, 55-654, 55-690, 55-752, 55-954

Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____

Date of Last Pump Test: _____ Yield of Well: 1,400 gpm Rated Pump Capacity _____ [ ] gpm, [ ] cfs

Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
2,683			41,879	42,319	43,757	51,820	37,570	43,070	53,934	64,576	32,532	414,140

7. Source Name: Well No. 4 (1000 E. 93 S.) Type: Well Location: Sec 13, T6S, R2E, SLB&M WR Number: 55-290, 55-321, 55-654, 55-690, 55-752, 55-954

Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____

Date of Last Pump Test: _____ Yield of Well: 3,300 gpm Rated Pump Capacity _____ [ ] gpm, [ ] cfs

Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
43,394	37,647	60,198	42,170	126,134	80,661	104,652	88,180	91,851	546			675,433

8. Source Name: Well No. 5 (250 E. 50 N.) Type: Well Location: Sec 14, T6S, R2E, SLB&M WR Number: 55-290, 55-321, 55-654,55-690, 55-752, 55-954

Method of measurement: [X] Master Meter, [ ] Individual Meter, [ ] Estimate, [ ] Other _____

Date of Last Pump Test: _____ Yield of Well: 3,500 gpm Rated Pump Capacity _____ [ ] gpm, [ ] cfs

Units of Measurement: Gal. X 1,000

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
28,654	48,904	60,377	39,914	88,949	72,752	88,978	82,119	77,004	84,759	20,456	39,946	732,812

SOURCE COMMENTS: Water Supply conditions were: [ ] Above normal, [X] Below normal

Water table levels are dropping at each Well location, and Springs are producing less water in comparison to other years. Both issues are attributed to the sixth straight year of drought conditions.

III. WATER USE BREAKDOWN: (If quantities are not known, please estimate percentages. See instructions for definition of uses shown in bold.)
Units of Measurement: Gallons
Source of data: [ ] Meter readings at the source; [X] Meter readings at individual connections; or [ ] Estimated

Residential:	Annual quantity of water delivered for residential purposes -	5,087,547,000	Total number of residential connections -	18,388
Commercial:	Annual quantity of water delivered for commercial purposes -	1,811,051,000	Total number of commercial connections -	1942
Industrial:	Annual quantity of water delivered for industrial purposes -	N/A	Total number of industrial connections -	N/A
Institutional:	Annual quantity of water delivered for institutional purposes -	N/A	Total number of institutional connections -	N/A
Stock watering:	Annual quantity of water delivered for stock watering purposes -	N/A	Total number of stock watering connections -	N/A
Un-metered:	Annual quantity of water delivered for un-metered purposes -	N/A	Total number of un-metered connections -	N/A
Wholesale:	Annual quantity of water delivered for wholesale purposes -	N/A	Total number of wholesale connections -	N/A
Other uses:	Annual quantity of water delivered for other uses purposes -	N/A	Total number of other uses connections -	N/A

Describe other uses N/A

Total annual quantity of water delivered for all purposes: 6,898,598,000 Total number of all connections: 20,330

IV. Irrigation System (Separate lawn and garden irrigation system, whether controlled by the drinking water supplier or not)
Is your area served by a separate irrigation water system? [X] Yes, [] No If yes please provide the following information:
What percent of your customers are served by a separate irrigation system? >1% The water delivered 100% by ditch _____ % by pressurized irrigation system _____
Number of Stock holders _____ Total shares of stock _____ Total acres irrigated 115

Please enter quantity of water delivered by the irrigation system: Institutional acreage _____ Quantity of water _____
Method of Measurement: [X] Master Meter, [ ] Individual meter, [ ] Estimate, [ ] Other
Units of Measurement: Acre Feet

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Yearly Total
			5 AF	25 AF	53 AF	63 AF	55 AF	45 AF	46 AF			292 AF

Do these quantities reflect water delivered to the municipal service area only? [X] Yes, [ ] No If no, percent delivered to municipal service area? _____

APPENDIX F

2003 UTAH LAKE BASIN

M&I DEPLETIONS

2003 UTAH LAKE BASIN MUNICIPAL AND INDUSTRIAL DEPLETION TABLE

(Acre-Feet/Year)

WATER SUPPLIER	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Treatment Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Diversions	Total Depletions
Juab County																				
Mona	73.6	116.0	5.0	15.0	0.0	**209.6**	120.0	80.6	249.0	72.1	3.9	2.9	0.0	79.0	0.0	***77.4***	83.0	160.4	329.6	169.2
Nephi	405.8	580.0	5.0	100.0	350.0	**1,440.8**	350.0	779.8	1,011.0	397.7	3.9	19.6	175.0	596.2	183.3	**400.9**	337.0	737.9	1,790.8	1,052.9
Rocky Ridge Town	23.2	15.5	0.6	3.0	0.7	**43.0**	0.0	25.0	18.0	22.7	0.5	0.6	0.4	24.1	0.0	***23.7***	6.0	29.7	43.0	13.3
TOTAL COMMUNITY SYSTEMS	**502.6**	**711.5**	**10.6**	**118.0**	**350.7**	**1,693.4**	**470.0**	**885.4**	**1,278.0**	**492.5**	**8.3**	**23.1**	**175.4**	**699.3**	**183.3**	**502.0**	**426.0**	**928.0**	**2,163.4**	**1,235.4**
Non-community systems	0.0	0.0	0.0	2.0	0.0	2.0	0.0	0.4	1.6	0.0	0.0	0.4	0.0	0.4	0.0	***0.4***	0.5	0.9	2.0	1.1
Self-Supplied Industries	0.0	0.0	0.0	0.0	10.0	10.0	190.0	10.0	0.0	0.0	0.0	0.0	5.0	5.0	0.0	***4.8***	0.0	4.8	200.0	195.3
Private Domestic Systems	67.0	133.0	0.0	0.0	0.0	200.0	0.0	67.0	133.0	65.7	0.0	0.0	0.0	65.7	0.0	***62.4***	44.3	106.7	200.0	93.3
COUNTY TOTALS	**569.6**	**844.5**	**10.6**	**120.0**	**360.7**	**1,905.4**	**660.0**	**962.8**	**1,412.6**	**558.2**	**8.3**	**23.5**	**180.4**	**770.4**	**183.3**	**569.5**	**470.9**	**1,040.4**	**2,565.4**	**1,525.0**
Summit County																				
Francis Town Water System	52.6	100.0	0.5	20.0	0.0	**173.1**	60.0	57.0	176.1	51.5	0.4	3.9	0.0	55.9	0.0	***53.1***	58.7	111.8	233.1	121.3
Woodland Mutual Water Co.	16.7	40.1	6.1	5.0	5.0	**72.9**	5.0	27.6	50.3	16.4	4.8	1.0	2.5	24.6	0.0	***23.4***	16.8	40.2	77.9	37.7
Subtotal Community Systems	**69.3**	**140.1**	**6.6**	**25.0**	**5.0**	**246.0**	**65.0**	**84.6**	**226.4**	**67.9**	**5.2**	**4.9**	**2.5**	**80.5**	**0.0**	**76.5**	**75.5**	**151.9**	**311.0**	**159.1**
Non-community systems	1.1	2.2	0.0	0.8	0.0	4.1	10.0	1.3	12.8	1.1	0.0	0.2	0.0	1.2	0.0	***1.2***	4.3	5.5	14.1	8.6
Self-Supplied Industries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***0.0***	0.0	0.0	0.0	0.0
Private Domestic Systems	3.3	6.7	0.0	0.0	0.0	10.0	0.0	3.3	6.7	3.2	0.0	0.0	0.0	3.2	0.0	***3.1***	2.2	5.3	10.0	4.7
COUNTY TOTALS	**73.7**	**149.0**	**6.6**	**25.8**	**5.0**	**260.1**	**75.0**	**89.1**	**246.0**	**72.2**	**5.2**	**5.1**	**2.5**	**85.0**	**0.0**	**80.7**	**82.0**	**162.7**	**335.1**	**172.4**
Utah County																				
Alpine	567.2	267.3	25.3	18.4	24.8	**903.0**	2,122.0	615.9	2,409.1	555.9	19.8	3.6	12.4	591.7	0.0	579.9	803.0	1,382.9	3,025.0	1,642.1
Alpine Cove Water SSD	14.9	59.0	0.0	0.0	1.0	**74.9**	0.0	15.9	59.0	14.6	0.0	0.0	0.5	15.1	0.0	14.8	19.7	34.5	74.9	40.4
American Fork City	1,766.3	2,782.1	1,473.2	3,689.1	0.0	**9,710.7**	500.0	3,682.7	6,528.0	1,731.0	1,155.0	723.1	0.0	3,609.0	0.0	3,536.8	2,176.0	5,712.9	10,210.7	4,497.8
Bradford Acres Water Assoc.	3.0	0.0	0.0	0.0	0.0	**3.0**	15.0	3.0	15.0	2.9	0.0	0.0	0.0	2.9	0.0	***2.8***	5.0	7.8	18.0	10.2
Cedar Fort	26.4	50.6	2.0	20.0	0.0	**99.0**	20.0	32.0	87.0	25.9	1.6	3.9	0.0	31.4	0.0	***29.8***	29.0	58.8	119.0	60.2
Cedar Hills	500.0	275.0	2.0	5.0	0.0	**782.0**	790.0	502.6	1,069.4	490.0	1.6	1.0	0.0	492.5	0.0	482.7	356.5	839.2	1,572.0	732.8
Covered Bridge Canyon	20.0	40.0	0.0	4.0	0.0	**64.0**	0.0	20.8	43.2	19.6	0.0	0.8	0.0	20.4	0.0	***19.4***	14.4	33.8	64.0	30.2
Eagle Mountain Town	687.4	683.8	15.0	922.6	0.0	**2,308.8**	0.0	883.9	1,424.9	673.7	11.8	180.8	0.0	866.2	0.0	848.9	475.0	1,323.9	2,308.8	984.9
Elberta	21.3	19.2	0.0	4.0	0.0	**44.5**	26.0	22.1	48.4	20.9	0.0	0.8	0.0	21.7	0.0	***20.6***	16.1	36.7	70.5	33.8
Elk Ridge	134.6	304.9	0.0	0.0	0.0	**439.5**	0.0	134.6	304.9	131.9	0.0	0.0	0.0	131.9	0.0	129.3	101.6	230.9	439.5	208.6
Fairfield Irrigation Company	3.0	2.0	0.0	1.0	2.0	**8.0**	25.0	5.2	27.8	2.9	0.0	0.2	1.0	4.1	0.0	***3.9***	9.3	13.2	33.0	19.8
Genola	87.5	40.0	0.5	2.0	130.0	**260.0**	320.0	218.3	361.7	85.8	0.4	0.4	65.0	151.5	0.0	***144.0***	120.6	264.5	580.0	315.5
Goosenest Water Company	8.4	29.2	0.0	0.0	0.0	**37.6**	0.0	8.4	29.2	8.2	0.0	0.0	0.0	8.2	0.0	***7.8***	9.7	17.6	37.6	20.0
Goshen	69.4	78.7	1.0	29.1	25.5	**203.7**	118.0	101.5	220.2	68.0	0.8	5.7	12.8	87.2	0.0	***82.9***	73.4	156.3	321.7	165.4
Hidden Creek Water Company	2.5	6.5	0.0	0.0	0.0	**9.0**	0.0	2.5	6.5	2.5	0.0	0.0	0.0	2.5	0.0	***2.3***	2.2	4.5	9.0	4.5
Highland Water Company	696.7	109.4	53.5	250.0	21.8	**1,131.4**	3,000.0	811.3	3,320.1	682.8	41.9	49.0	10.9	784.6	0.0	768.9	1,106.7	1,875.6	4,131.4	2,255.8
Lehi	2,118.2	0.0	253.4	250.0	25.0	**2,646.6**	5,000.0	2,395.9	5,250.7	2,075.8	198.7	49.0	12.5	2,336.0	0.0	2,289.3	1,750.2	4,039.5	7,646.6	3,607.1
Lindon	674.1	200.0	200.0	150.0	200.0	**1,424.1**	1,350.0	1,064.1	1,710.0	660.6	156.8	29.4	100.0	946.8	0.0	927.9	570.0	1,497.9	2,774.1	1,276.2
Manila Culinary Water Company	214.4	858.1	33.9	22.6	0.0	**1,129.0**	0.0	246.0	883.0	210.1	26.6	4.4	0.0	241.1	0.0	236.3	294.3	530.6	1,129.0	598.4
Mapleton	475.0	1,045.0	10.6	16.1	8.4	**1,555.1**	400.0	495.1	1,460.0	465.5	8.3	3.2	4.2	481.2	0.0	471.5	486.7	958.2	1,955.1	996.9
North Fork SSD	50.0	100.0	105.0	50.0	0.0	**305.0**	0.0	144.0	161.0	49.0	82.3	9.8	0.0	141.1	0.0	***134.1***	53.7	187.7	305.0	117.3
Orem City	6,771.3	8,841.8	3,000.0	2,000.0	550.0	**21,163.1**	292.0	10,121.3	11,333.8	6,635.9	2,352.0	392.0	275.0	9,654.9	0.0	9,461.8	3,777.9	13,239.7	21,455.1	8,215.4
Payson	1,142.5	26.4	170.0	260.0	40.0	**1,638.9**	2,950.0	1,370.5	3,218.4	1,119.7	133.3	51.0	20.0	1,323.9	0.0	1,297.4	1,072.8	2,370.2	4,588.9	2,218.7
Pleasant Grove City	1,850.0	2,730.0	515.0	343.3	171.7	**5,610.0**	400.0	2,502.4	3,507.6	1,813.0	403.8	67.3	85.9	2,369.9	0.0	2,322.5	1,169.2	3,491.7	6,010.0	2,518.3
Provo City	8,627.8	9,910.7	7,101.0	3,369.0	725.0	**29,733.5**	2,435.0	15,707.4	16,461.1	8,455.2	5,567.2	660.3	362.5	15,045.3	0.0	14,744.3	5,487.0	20,231.4	32,168.5	11,937.1
Salem	375.0	830.0	30.0	115.0	15.0	**1,365.0**	100.0	437.0	1,028.0	367.5	23.5	22.5	7.5	421.1	46.5	**366.2**	342.7	708.8	1,465.0	756.2
Santaquin City	435.3	406.5	45.0	15.0	10.0	**911.8**	300.0	484.3	727.5	426.6	35.3	2.9	5.0	469.8	52.0	**408.4**	242.5	650.9	1,211.8	560.9
Saratoga Spring Municipal	450.0	140.0	5.0	45.0	0.0	**640.0**	600.0	463.0	777.0	441.0	3.9	8.8	0.0	453.7	0.0	444.7	259.0	703.7	1,240.0	536.3
Spanish Fork	1,751.9	363.0	416.2	846.4	212.9	**3,590.4**	3,900.0	2,467.0	5,023.4	1,716.9	326.3	165.9	106.5	2,315.5	0.0	2,269.2	1,674.5	3,943.7	7,490.4	3,546.7
Spring Lake	33.0	66.0	2.0	5.0	10.0	**116.0**	38.0	45.6	108.4	32.3	1.6	1.0	5.0	39.9	0.0	***37.9***	36.1	74.0	154.0	80.0
Springdell Plat A & B	7.6	13.0	0.0	1.5	0.0	**22.1**	0.0	7.9	14.2	7.4	0.0	0.3	0.0	7.7	0.0	7.6	4.7	12.3	22.1	9.8
Springville City	1,855.0	1,986.6	890.3	190.3	1,945.0	**6,867.2**	653.0	4,550.3	2,969.9	1,817.9	698.0	37.3	972.5	3,525.7	0.0	3,455.2	990.0	4,445.1	7,520.2	3,075.1
Utah State Hospital	0.0	0.0	0.0	175.0	0.0	**175.0**	75.0	35.0	215.0	0.0	0.0	34.3	0.0	34.3	0.0	33.6	71.7	105.3	250.0	144.7
White Hills Subdivision	30.0	75.0	1.0	0.0	0.0	**106.0**	0.0	30.8	75.2	29.4	0.8	0.0	0.0	30.2	0.0	***28.7***	25.1	53.7	106.0	52.3
Woodland Hills	87.4	92.2	0.0	10.0	0.0	**189.6**	0.0	89.4	100.2	85.7	0.0	2.0	0.0	87.6	0.0	***83.2***	33.4	116.6	189.6	73.0
Subtotal Community Systems	**31,557.1**	**32,432.0**	**14,350.9**	**12,809.4**	**4,118.1**	**95,267.5**	**25,429.0**	**49,717.8**	**70,978.7**	**30,926.0**	**11,251.1**	**2,510.6**	**2,059.1**	**46,746.8**	**98.5**	**45,694.5**	**23,659.6**	**69,354.0**	**120,696.5**	**51,342.5**
Non-community systems	11.7	23.5	6.8	56.1	180.0	278.1	26.0	208.4	95.7	11.5	5.3	11.0	90.0	117.8	0.0	***111.9***	31.9	143.8	304.1	160.3
Self-Supplied Industries	0.0	0.0	0.0	0.0	675.0	675.0	9,702.0	675.0	857.0	0.0	0.0	0.0	337.5	337.5	0.0	***320.6***	285.7	606.3	10,377.0	9,770.7
Private Domestic Systems	1,667.0	3,333.0	0.0	0.0	0.0	5,000.0	0.0	1,667.0	3,333.0	1,633.7	0.0	0.0	0.0	1,633.7	0.0	***1,552.0***	1,111.0	2,663.0	5,000.0	2,337.0
COUNTY TOTALS	**33,235.8**	**35,788.5**	**14,357.7**	**12,865.5**	**4,973.1**	**101,220.6**	**35,157.0**	**52,268.2**	**75,264.5**	**32,571.1**	**11,256.4**	**2,521.6**	**2,486.6**	**48,835.7**	**98.5**	**47,679.0**	**25,088.2**	**72,767.1**	**136,377.6**	**63,610.5**

(table continued on following page)

2003 UTAH LAKE BASIN MUNICIPAL AND INDUSTRIAL DEPLETION TABLE

(Acre-Feet/Year)

WATER SUPPLIER	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Treatment Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Diversions	Total Depletions
Wasatch County																				
Canyon Meadows	4.0	7.0	0.0	5.0	0.0	**16.0**	0.0	5.0	11.0	3.9	0.0	1.0	0.0	4.9	0.0	***4.7***	3.7	8.3	16.0	7.7
Center Creek Culinary Water Co.	13.2	15.2	0.0	0.0	0.0	**28.4**	27.0	13.2	42.2	12.9	0.0	0.0	0.0	12.9	0.0	***12.3***	14.1	26.4	55.4	29.0
Charleston WCD	42.2	89.8	0.5	2.5	15.0	**150.0**	80.0	58.1	171.9	41.4	0.4	0.5	7.5	49.7	0.0	***47.3***	57.3	104.6	230.0	125.4
Country Estates Mobile Homes	11.2	0.0	0.0	0.0	0.0	**11.2**	3.0	11.2	3.0	11.0	0.0	0.0	0.0	11.0	0.0	***10.4***	1.0	11.4	14.2	2.8
Daniel Domestic Water Company	28.6	44.5	0.0	0.0	0.1	**73.2**	67.1	28.7	111.6	28.0	0.0	0.0	0.1	28.1	0.0	***26.7***	37.2	63.9	140.3	76.4
Heber City Water System	687.1	811.9	293.4	134.0	34.6	**1,961.0**	300.0	983.2	1,277.8	673.4	230.0	26.3	17.3	946.9	78.6	**821.0**	425.9	1,246.9	2,261.0	1,014.1
Interlaken Mutual Water Company	24.2	26.9	0.0	0.0	0.0	**51.1**	0.0	24.2	26.9	23.7	0.0	0.0	0.0	23.7	0.0	***22.5***	9.0	31.5	51.1	19.6
Jordanelle Special Service District	91.4	66.6	5.8	5.0	0.0	**168.8**	0.0	97.0	71.8	89.6	4.5	1.0	0.0	95.1	0.0	***90.3***	23.9	114.3	168.8	54.5
Midway City Water System	194.5	235.0	45.0	10.0	40.0	**524.5**	800.0	272.5	1,052.0	190.6	35.3	2.0	20.0	247.9	78.6	**156.8**	350.7	507.5	1,324.5	817.0
Storm Haven	10.5	7.0	0.0	0.0	0.0	**17.5**	30.0	10.5	37.0	10.3	0.0	0.0	0.0	10.3	0.0	***9.8***	12.3	22.1	47.5	25.4
Swiss Alpine Water Co.	21.0	10.0	0.0	0.0	0.0	**31.0**	0.0	21.0	10.0	20.6	0.0	0.0	0.0	20.6	0.0	***19.6***	3.3	22.9	31.0	8.1
Timber Lakes Water SSD	80.0	0.0	0.0	0.0	0.0	**80.0**	0.0	80.0	0.0	78.4	0.0	0.0	0.0	78.4	0.0	***74.5***	0.0	74.5	80.0	5.5
Twin Creeks SSD	54.1	5.8	0.0	0.0	0.0	**59.9**	100.0	54.1	105.8	53.0	0.0	0.0	0.0	53.0	0.0	***50.4***	35.3	85.6	159.9	74.3
Wallsburg Town Water System	33.0	20.0	0.1	3.5	0.0	**56.6**	70.0	33.8	92.8	32.3	0.1	0.7	0.0	33.1	0.0	***31.4***	30.9	62.4	126.6	64.2
Woodland South Hills Irrigation	4.0	5.3	0.0	0.0	0.2	**9.5**	25.0	4.2	30.3	3.9	0.0	0.0	0.1	4.0	0.0	***3.8***	10.1	13.9	34.5	20.6
Subtotal Community Systems	**1,299.0**	**1,345.0**	**344.8**	**160.0**	**89.9**	**3,238.7**	**1,502.1**	**1,696.7**	**3,044.1**	**1,273.0**	**270.3**	**31.4**	**45.0**	**1,619.7**	**157.3**	**1,381.4**	**1,014.7**	**2,396.1**	**4,740.8**	**2,344.7**
Non-community systems	7.7	15.3	8.8	82.1	0.0	113.9	955.0	31.2	1,037.7	7.5	6.9	16.1	0.0	30.5	0.0	***29.0***	345.9	374.9	1,068.9	694.0
Self-Supplied Industries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***0.0***	0.0	0.0	0.0	0.0
Private Domestic Systems	167.0	333.0	0.0	0.0	0.0	500.0	0.0	167.0	333.0	163.7	0.0	0.0	0.0	163.7	0.0	***155.5***	111.0	266.5	500.0	233.5
COUNTY TOTALS	**1,473.7**	**1,693.3**	**353.6**	**242.1**	**89.9**	**3,852.6**	**2,457.1**	**1,894.9**	**4,414.8**	**1,444.2**	**277.2**	**47.5**	**45.0**	**1,813.9**	**157.3**	**1,565.9**	**1,471.6**	**3,037.5**	**6,309.7**	**3,272.2**

	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Treatment Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Diversions	Total Depletions
Basin Community Systems	**33,428.0**	**34,628.6**	**14,712.9**	**13,112.4**	**4,563.7**	**100,445.6**	**27,466.1**	**52,384.5**	**75,527.2**	**32,759.4**	**11,534.9**	**2,570.0**	**2,281.9**	**49,146.2**	**439.1**	**47,654.4**	**25,175.7**	**72,830.1**	**127,911.7**	**55,081.6**
Total Non-Community Systems	20.5	41.0	15.6	141.0	180.0	398.1	991.0	241.2	1,147.9	20.1	12.2	27.6	90.0	150.0	0.0	142.5	382.6	525.1	1,389.1	864.0
Self-Supplied Industries	0.0	0.0	0.0	0.0	685.0	685.0	9,892.0	685.0	857.0	0.0	0.0	0.0	342.5	342.5	0.0	325.4	285.7	611.0	10,577.0	9,966.0
Private Domestic Systems	1,904.3	3,805.7	0.0	0.0	0.0	5,710.0	0.0	1,904.3	3,805.7	1,866.2	0.0	0.0	0.0	1,866.2	0.0	1,772.9	1,268.6	3,041.5	5,710.0	2,668.5
WEBER RIVER BASIN TOTALS	**35,352.8**	**38,475.3**	**14,728.5**	**13,253.4**	**5,428.7**	**107,238.7**	**38,349.1**	**55,215.0**	**81,337.8**	**34,645.7**	**11,547.1**	**2,597.7**	**2,714.4**	**51,504.9**	**439.1**	**49,895.1**	**27,112.6**	**77,007.7**	**145,587.8**	**68,580.1**

Color Code:

- **Potable Use Data**
- **Secondary Use Data**
- **Indoor/Outdoor Use Data**
- **Return Flow Data**
- **Diversion Data**
- **Depletion Data**

Treatment Facility Key: Regular = Sewage Treatment Plant
Bold = Facultative Ponds/ Lagoons
Bold/Italics= Septic System/Tanks